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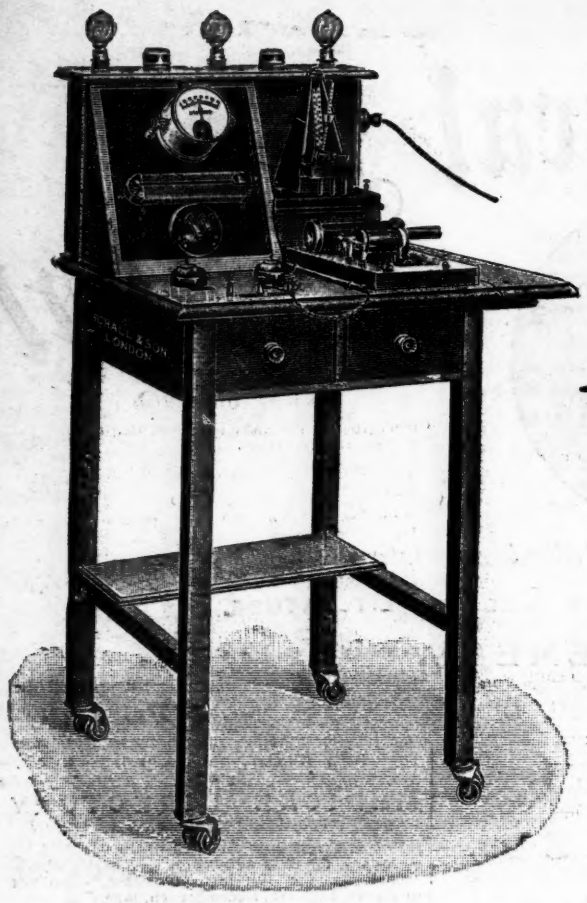

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PERCY SARGENT, C.M.G., D.S.O., F.R.C.S.,
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IN 1881 the late Mr. Frederick Page of Newcastle wrote as follows: "The operation of trephining the spine, proposed many years ago and adopted several times, has made no progress in surgery; nor is it likely to do so. It is an operation not within the range of practical surgery."[1] It was only a few years later that Sir Victor Horsley, in 1887, deliberately opened the spinal canal and removed a tumour from between the membranes and the cord. This operation gave the first effective impetus to the development of spinal surgery, and there is no single landmark in surgical history which stands out with greater distinctness.

This classical case, which marks the real beginning of the operative surgery of the spinal cord, may be briefly recalled. The patient was a man, under the care of Sir William Gowers, 42 years of age, who had suffered for three years from a peculiar pain localized to a spot beneath the lower part of the left scapula, increased by exertion and varying in severity from time to time, with intervals of freedom. Four months before the operation the left leg became weak, and a few weeks later the right leg became similarly affected. During the next two months sensation became impaired and urinary retention appeared. The condition was regarded by various physicians as aneurysm, intercostal neuralgia, or hysteria. At the time of the operation there was complete paraplegia, with loss of all forms of sensibility up to the level of the ensiform cartilage. Just above this level there was severe girdle pain, worse on the left side than on the right, and increased to agony on any movement. There was some diminution of tactile sensibility up to the fourth intercostal space. A diagnosis of tumour pressing upon the cord was made by Gowers, and in June, 1887, Horsley removed the arches of the first six thoracic vertebrae and exposed an almond-shaped tumour, of a dark bluish-red colour, resting upon and attached to the left fourth thoracic nerve, jammed between the dura mater and the spinal cord. The growth proved to be a fibromyxoma. A year later the patient was doing his full day's work, which necessitated much walking and standing about.[2]

Since that date not only have large numbers of similar tumours been successfully removed, but also intramedullary tumours have been enucleated, intramedullary cysts and the cavities of syringomyelia have been incised, and many other pathological conditions causing symptoms of compression of the spinal cord have been successfully dealt with through the opening afforded by the operation of laminectomy.

The following remarks are based upon a series of 27 cases which I have operated upon during the past ten years. These are all cases of true neoplasm of one sort or another associated with cord symptoms; all cases of syphilis, tuberculous disease, and cyst are excluded.

Of the various ways in which these tumours may be grouped I prefer to take the regional rather than the histological. On this basis they fall into three groups, according to whether they are (1) intrathecal but extramedullary, (2) intramedullary, and (3) extrathecal.

Intrathecal extramedullary tumours present themselves either as definitely encapsuled masses, which are almost invariably of a benign nature, or as diffuse masses of growth extending over a somewhat large area, whether of the cord itself or of the cauda equina, and histologically of a malignant character.

ENCAPSULED INTRATHECAL EXTRAMEDULLARY TUMOURS.

Fifteen of the twenty-seven cases belong to this class. They possess a certain similarity in size, appearance, encapsulation, and relationship to the cord. With a single exception ("fibrosarcoma") the histological characteristics* of this class are those of benign tumours, namely:

Neurofibroma	4
Endothelioma	3
Psammoma...	3
Fibroma	2
Fibromyxoma	2

Such tumours may be firmly attached to the inner aspect of the dura mater or to a nerve root. On the other hand, their connexions are sometimes so flimsy that they appear to lie almost free in the arachnoid, and they can be picked out without causing any haemorrhage, and without it being possible to determine their actual point of origin. At the level of the tumour the whole thecal lumen may be so filled up that the cerebro-spinal fluid above has little or no communication with that below. Hence pulsation is only to be seen above the tumour, and this may be a valuable topographical indication during an exploratory operation. When such a tumour has been removed, there remains a scaphoid depression in the cord which does not appreciably alter either in size or in depth during the time that the cord is exposed, despite the fact that the displaced cord usually moves so as to occupy more nearly its natural position. In some very long standing cases the cord appears to be flattened to a ribbon, so that one wonders how any impulses at all can be conducted through it.

The situation of these tumours in relation to the cord is most commonly postero-lateral—that is, the cord is displaced forwards and towards the opposite side (7 cases); it may be in the middle line posterior to the cord (2 cases); antero-laterally situated so as to push the cord backwards and towards the opposite side (4 cases); or anterior to the cord so as to be invisible until the cord is drawn aside (2 cases).

Segmental Level.

In neither of the fifteen cases under review was the tumour situated above the fifth cervical or below the eleventh thoracic segment. The actual situations were C.5, C.7, D.1, D.2 (3 cases), D.3, D.4, D.5 (2 cases), D.7 (2 cases), D.8, D.10, and D.11. In each case the segment quoted is the uppermost reached by the tumour.

SYMPTOMATOLOGY.

There does not appear to be any constant relationship between the position of the tumour, as regards the cord, and the incidence of the symptoms. The order in which these make their appearance is very variable.

Pain.

The most usual initial symptom is pain, referred to the area of distribution of one or more of the spinal nerve roots. This was the first symptom in eight of the fifteen cases. It may be very severe and persistent, or it may amount to nothing more than an unpleasant sense of constriction, and it may for many months or even years be the only cause of complaint.

This circumstance is sufficiently striking to suggest that in any case where severe and persistent pain, localized to the distribution of one or more nerve roots, cannot be satisfactorily accounted for, the possibility of a spinal tumour being present should be seriously considered.

Pain in the back is not a common occurrence in cases of spinal tumour of this class. When it has been present (in three of these fifteen cases) it has been the first symptom of which the patient has complained, has been unaccompanied at any time by root pain or girdle sensation, and has preceded the other symptoms by some months. In no case has any tenderness, rigidity, deformity, or abnormal radiographic appearance been noted.

A third type of pain of which these patients may complain is "pain in the legs." With tumours involving the cauda equina, such pains are naturally of the same character and causation as root pains elsewhere. But patients with tumours at a higher level sometimes complain of pain in the legs. Usually, on close questioning, it is obvious that these pains are associated with spastic involuntary contractions of the muscles, but in other instances this does not appear to be the explanation. It is possible that in some cases at least the pain is

* I am indebted to Dr. J. G. Greenfield for a recent re-examination of all these tumours.

dependent upon variations of pressure in the cerebro-spinal fluid. The thecal canal may be so fully occupied at the level of the tumour that the fluid pressures above and below may be different, and it is possible that in such circumstances a sudden exertion on the part of the patient may drive down a small quantity of fluid past the block so as suddenly to increase its tension to a point at which pain is produced. This seemed to be the explanation of the "sharp shooting pains down both hips and thighs" in one case, where the tumour was found to block the thecal canal at the level of the eighth thoracic segment.

In a recent case, not included in this series, pain in the left thigh and leg, of "sciatica" type, was for a long while the most prominent symptom, the tumour being a small hard encapsuled "psammoma" cupping the lateral aspect of the cord at the level of the eighth thoracic segment on the right side. This suggests direct pressure by the tumour upon the pain fibres in the antero-lateral column.

In a series of 33 cases of intramedullary tumour recorded by Horsley pain was the first symptom complained of in 21.

Paraesthesia.

"Numbness" in the legs is often complained of (9 cases), but always in association with weakness. Impairment of sensibility of a more definite character is sometimes noticed by the patient. Thus, one patient found that one leg was less sensitive to pain than the other; another that one leg always felt cold; another that "she could not feel the water on her legs in the bath."

Motor Symptoms.

Weakness of the legs had been present before operation in all the cases, and varied from slight impairment to complete loss of all voluntary movements. In three instances "stiffness," "jerking," or weakness was the first symptom noticed by the patient. In one of these cases the weakness preceded the onset of root pain by twelve months, and in the other two no root pain at all was complained of.

With a single exception the weak or paralysed legs were spastic, though never to an extreme degree. It is instructive to note that the one patient whose paralysed legs were stated to be "somewhat flaccid," had been unable to walk for seven years, and that no motor improvement had occurred more than five years after removal of the tumour.

Impairment of Sphincter Control.

It is a very striking fact that in eight of the fifteen cases there was no impairment of vesical function at any time, even though other symptoms had been present for periods varying from one to three years. In most of the other cases the impairment of function amounted to little more than precipitancy or hesitancy of micturition, usually the former. Very rarely is a catheter required. As would be expected, therefore, cystitis is an uncommon complication, and one that is comparatively easily dealt with if it does occur. This contrasts strongly with the gross impairment of function and the fulminating cystitis so common in cases of paraplegia of more rapid onset.

NEUROLOGICAL EXAMINATION.

The date at which sensibility first becomes affected cannot be ascertained, as the patients are often unaware of any impairment, unless it is of a particularly gross character. The greatest diversity of symptoms exists in this respect, as would naturally be expected from the variations in position of the tumours, the different degrees of pressure exerted by them, and the extreme slowness with which the compression advances. Frequently the upper limit of the sensory change is not abrupt, as it is in the case of a more sudden and severe lesion; and as in a certain proportion of cases (five out of fifteen) there are no root symptoms to afford a guide, it becomes a matter of the utmost importance, for localization, to examine carefully for the uppermost limit of even the slightest differences in appreciation of the various sensory stimuli. In this respect repeated examinations are necessary, as variations in the upper level of slight changes are met with from time to time.

The Brown-Séquard syndrome is frequently met with. In several of the cases it was well marked when the patients first came under observation. In the majority a definite history was obtained of one leg becoming affected before the other.

When the tumour is related to one of the lower thoracic segments the abdominal reflexes may afford a more valuable localizing sign than the level of sensory change.

CLINICAL COURSE AND PROGNOSIS.

The course pursued by a case of spinal tumour is characteristic. It is slow, but remorseless. There is rarely any appreciable halting, more rarely still any temporary amelioration, and gradually the symptoms progress to the inevitably fatal termination unless relief is afforded by operation. It is in this field that the science of neurology and the art of surgery combine to achieve one of their greatest triumphs.

Horsley stated the average total duration of the symptoms in these cases of simple tumour to be three and two-thirds years. In the present series of fifteen cases it was two years, despite the fact that one patient had had symptoms for no less then nine years. It is to be hoped that the future will show a still greater improvement in this respect, as the condition becomes recognized at an earlier date.

It would be expected that the rapidity and completeness of recovery after operation would be materially affected by the length of time during which the cord had been subjected to pressure. Whilst this cannot be denied, it is true only within wide limits. Whereas in the majority of cases in which a complete or practically complete recovery occurred weakness had been present for less than twelve months, yet in one instance the legs had been weak for nearly three years. On the other hand, one patient who had been virtually paralysed for eight years showed no sign of motor recovery five and a half years after removal of the tumour. The most striking immediate result of operation is the relief of pain. This may be confidently predicted whatever may have been its previous duration, and whether or not nerve roots are divided when the tumour is removed.

Power, as a rule, begins to return before sensation. In a favourable case a definite improvement in voluntary power may be observed to take place within a week of the operation. In one patient the weakness had been coming on gradually for nine months, and at the time of the operation the legs were spastic and no voluntary movements were possible; the sensory loss was complete. In ten days power began to return and in eight weeks he was beginning to walk, but no return of sensibility to pin-prick or to cotton-wool was detected for nine weeks. In another patient with nine months' history, where spastic weakness and partial loss to all forms of sensibility were present at the time of the operation, power was rapidly returning in three weeks, but sensation was unaltered. The sensory return takes place uniformly over the affected area, the original level remaining distinguishable throughout. In two cases, examined respectively five and six years after operation, although recovery was in all respects practically perfect, the old level could still be definitely ascertained by a distinct difference to pin-prick above and below.

Four cases operated upon between five and six years ago have recently been examined with a view to ascertaining the degree of the completeness of the recovery. The chief points may be very briefly summarized as follows:

Endothelioma at Level of Fourth Thoracic Segment.

Female, aged 71 (under the care of Dr. James Collier). Fifteen months' history. Extreme spasticity; slight voluntary movements in right lower limb, none in left; profound loss to all forms of sensation; no sphincter trouble; bedsores. Tumour completely removed.

Six years after operation, in perfect health. No ascertainable weakness of legs; deep reflexes normal; plantars flexor; position sense and localization perfect; no loss to cotton-wool; pin-prick well appreciated everywhere, but it "gets sharper" when old level is reached.

Neurofibroma at Level of Tenth Thoracic Segment.

Male, aged 35 (under the care of Dr. Tooth). Twelve months' history. Severe root pain; lower limbs extremely spastic; no voluntary movements; complete loss to all forms of sensation below level. Tumour completely removed.

Five and a half years after operation was doing full work as an agricultural labourer. Says left leg feels weaker than right. No difference in power detected; powerful muscular limbs; deep reflexes normal; abdominals absent; plantars extensor; no loss detected to touch, pin-prick, or localization; position sense in left foot very defective.

Fibromyxoma at Level of Seventh Cervical Segment.

Male, aged 32 (under the care of Dr. James Collier). Nine months' history. Before operation upper limbs weak and flaccid; intrinsic muscles of hands wasted; neuralgic pains in ulnar fingers; muscles of trunk and lower limbs very spastic; no voluntary movements in right lower limb; feeble in left; profound loss to all forms of sensation to level of C.7; dysuria. Tumour completely removed.

Five years after operation was doing full work as a letter sorter. No clumsiness or weakness in hands; no wasting; no pain; no sphincter trouble; deep reflexes somewhat brisk; abdominals present and plantars flexor; no sensory loss detected, but old level can still be mapped out by a slight dulling to pin-prick below.

In contrast to the foregoing the following may be related:

Psammoma at Level of Seventh Thoracic Segment.

Female, aged 32 (under the care of Dr. Tooth). Pain in back nine years and weakness of legs eight years before operation. On examination, complete loss to all forms of sensation; complete motor palsy with ankle clonus; plantars extensor; precipitancy of micturition.

Five and a half years after operation, no recovery of power whatever. Sphincter control normal; appreciates cotton-wool everywhere, but cannot localize; feels pin-prick and hot and cold tubes merely as unlocalizable touch.

Operative Technique.

The procedure adopted in all cases is practically the same as that employed by Horsley, except for the method of anaesthesia. Chloroform and intravenous hedonal, which Dr. Mennell administered for me in a few cases, have been discarded in favour of ether given by the intratracheal method. I do not believe that, provided cyanosis is avoided, the haemorrhage is any greater with ether than with chloroform; whilst the abolition of the respiratory movements, and in cervical cases the being able to have the neck flexed as acutely as may be desired, is of great assistance. The amount of blood lost depends more on the surgeon's technique and resource than upon the anaesthetist.

If the first stages of the operation are conducted rapidly under a stream of normal saline solution at 118° F., and if time is not wasted in endeavouring to seize individual bleeding points with forceps, the amount of blood lost need not be great. The spinous process corresponding to the position of the tumour is first marked by a transverse scratch on the skin, and then a median vertical incision is made with this mark as its centre. The muscles are rapidly stripped from the bones, and then at least five spinous processes are cut away at their bases with strong forceps. If now the large wound is packed tightly for a few minutes with gauze, it can be rendered remarkably dry, and the rest of the operation should be almost bloodless.

The laminal arches are next removed with Horsley's laminectomy forceps, exposing the layer of fat surrounding the theca. This has to be stripped off, and the theca can then be examined. Sometimes the tumour can be easily felt at this stage, or a difference of thecal pulsation above and below may indicate its position. I always endeavour to open the dura, by a median vertical incision, without wounding the arachnoid. In this manner a beautiful view of the tumour is obtained, seen through the transparent arachnoid, and its relations to the cord and nerve roots accurately ascertained. If the cerebro-spinal fluid is allowed to escape the posterior nerve roots, which normally float free, fall against the cord, so that their real relationship to it and to the tumour cannot be determined. I have several times seen the tumour, through the unopened arachnoid, moving up and down for a short distance, like a shuttle, with the pulsations of the cerebro-spinal fluid.

The arachnoid is next torn through and the tumour can then be gently lifted out of its bed with some small blunt instrument. If necessary a nerve root or a tooth of the ligamentum denticulatum must be divided. It should hardly be necessary to state that this part of the operation must be conducted slowly and with the utmost gentleness.

The theca should be sutured and the muscles brought accurately together, preferably in two separate layers, in order to avoid any chance of leakage.

Post-operative Dangers.

Leakage of cerebro-spinal fluid is a dangerous complication. It introduces the possibility of meningitis, and, apart from that, the patients usually suffer a good deal in general health, for the total amount of fluid lost may be enormous.

Two of my patients have died suddenly within forty-eight hours of the operation, the tumours having been removed from alongside the upper thoracic part of the cord.

Other occasional causes of serious symptoms, which may terminate fatally, are acute dilatation of the stomach, and paralytic ileus.

Results.

Of the 15 cases in this series, 11 may be described as in all respects satisfactory. Of these patients 6 are (or when last heard of were) doing their full ordinary work; another, 77 years of age, is in perfect health and vigour, and the other 4 are so far recovered that they may reasonably be regarded as successful cases. Of the 4 unsuccessful results 1 (whose paralysis had existed for nine years before operation) remains virtually *in statu quo* five and a half years after removal of the tumour. The remaining 3 patients died. They are instructive cases, and may be very briefly quoted:

Case I.

W. L., male, aged 47. After having suffered pain in the back for fifteen months, and increasing weakness in the legs for ten months, was admitted to the National Hospital under Dr. James Taylor. On admission he had spastic paraplegia, almost complete, with impairment of sphincter control, and almost total loss to all forms of sensibility up to the level of the eleventh thoracic segment.

A laminectomy was performed, and the cord exposed from the sixth thoracic to the first lumbar segments. No sign whatever of a tumour could be found. Seven weeks after this unsuccessful exploration he had voluntary movements at all joints of the lower limbs, less involuntary spasm, and much less complete sensory loss, together with considerable improvement in sphincter control. He left hospital much improved, but was readmitted two years later in practically the same condition as he had been prior to the first operation. It was decided to attempt to relieve the distressing muscular spasms, and accordingly another laminectomy was performed, and the posterior roots of the second, third, and fifth lumbar and the second sacral nerves were divided on both sides. Five days later he died from paralytic distension of the bowel.

Post mortem an endothelioma 2¾ by 1¾ cm. was found, attached firmly to the dura, lying wholly in front of the eleventh thoracic segment, which was flattened to a ribbon over it. The particularly interesting points in the case are (1) that the tumour was in an unusual position and completely out of sight, (2) that at no time were any root pains experienced, (3) that pain in the back had existed for six months before the onset of any other symptoms, (4) that death after the second operation was due to paralytic ileus, and (5) that the mere relief of pressure afforded by the first operation was followed by a considerable degree of temporary improvement.

Case II.

Male, aged 59 (under the care of Dr. Risien Russell). When first admitted to the National Hospital he had suffered from girdle pain at the twelfth thoracic level for five months, and dragging first of one leg and then of the other for four months. He had no sphincter trouble; both legs were weak and spastic, the right more so than the left. The sensory loss was almost complete to all forms up to the twelfth thoracic level on the left side. Three weeks later, whilst the girdle sensation persisted at the same level, the level of sensory loss had moved upwards and spread to the opposite limb. Three months later there was sensory loss up to a definite level—that of the third thoracic segment. The legs were much worse and very spastic; slight hesitancy of micturition had appeared.

A fibroma, the size of a small marble, was removed from in front of the cord at the level of the third thoracic segment. The operation was easy and without untoward incident, and all went well until thirty hours later, when he died quite suddenly and without warning.

Post mortem nothing was found to account for his death.

Case III.

Female, aged 34 (under the care of Dr. James Taylor). Two years' history of stiffness and weakness in the legs, abdominal girdle pains, and loss of feeling in the legs. No sphincter trouble.

A firm tumour, attached to the right eighth cervical posterior root, was easily removed. It was pronounced microscopically to be a fibrosarcoma. All went well for nine days, when removal of the stitches was followed by leakage of cerebro-spinal fluid. This continued, and a month after the first operation the muscles were re-sutured. Meanwhile a considerable degree of improvement had occurred both as regards power and sensation, and the general condition had remained excellent. Some thirty hours after the closure of the wound she died quite suddenly.

Post mortem nothing was discovered to account for the death.

OTHER FORMS OF SPINAL TUMOUR.

Twelve cases of tumour causing cord symptoms, other than the encapsuled intrathecal extramedullary type, were encountered during the same period. They contrast strongly in many ways with the others. In the first place the tumours were, without exception, of a malignant

character, though their degree of malignancy, judged clinically, was extremely variable.

I classify these tumours, according to their probable point of origin with relation to the cord, into three groups: (1) Intrathecal extramedullary, (2) intramedullary, (3) extrathecal.

The membranes constitute an almost if not absolutely impermeable barrier to the spread of these growths, so that we rarely find any overlapping between these three groups. All tend to spread upwards or downwards in a direction parallel with the cord, confined within the limits of the pia or dura as the case may be. In only one case did an intradural tumour gain the exterior of the theca, and that was through the operative incision.

With the upward spread of the tumour mass there develops a gradual compression of the cord, which progressively reaches a higher level. Hence we find that with malignant tumours there is often a varying upper limit of sensory change, together with root pains spread over many segmental areas. These are important points in the diagnosis between diffuse malignant tumours on the one hand and the more definitely localized encapsulated tumours on the other.

LEVEL AND SYMPTOMS.

In the three cases of non-encapsuled extramedullary intrathecal tumours, all sarcomatous, the tumour involved the cauda equina, and the nerve roots were surrounded by growth. Nevertheless, radiating pain was absent in two of them; in these two pain in the back was noticed early. Loss of sphincter control was an early and prominent symptom in two instances; in both of these the growth surrounded the conus medullaris.

The cases of intramedullary tumour contrast strongly with these extramedullary malignant ones, for in the former weakness and numbness in the limbs is the earliest symptom, though in one of the four radiating pains had occurred before any other symptom. Again, sphincter disturbance is slight or absent as a rule in the intramedullary cases.

If we compare the incidence of the symptoms in cases of extrathecal tumour due to malignant disease of the bones, whether primary or secondary, we find pain, either local or radiating, to be the first symptom, and usually it is of an extremely severe character and is increased on movement. Sphincter disturbances are not much in evidence in these cases.

Whilst *x*-ray examination has so far been uniformly negative in other forms of tumour, it usually gives valuable help in the cases of tumour arising in the bones. We cannot, however, in this manner distinguish between malignant disease and tuberculous caries; and even when exposed by operation the granulation mass, in some cases of tuberculosis, has so closely resembled tumour that only by microscopical examination has the true nature of the case been ascertained.

In none of the 12 cases of malignant growth in this series was the exact nature of the case diagnosed before operation. The fact that the cord was being subjected to an increasing degree of compression led in each instance to the performance of an exploratory laminectomy, and in all but one the diagnosis of "tumour" was made before operation (one was thought to be tuberculous caries); in all, too, the segmental level of the compression was correctly ascertained before operation. But in no instance could the exact position with relation to the cord and membranes, or the nature of the tumour be foretold. The operations were therefore primarily of an exploratory character.

RESULTS.

Two patients—one with a high cervical intramedullary tumour, and the other with a sarcoma of bone in the upper dorsal region—died within a few hours of the operation. The rest may be briefly set out as follows:

A. *Diffuse Intrathecal Extramedullary Growths.*

Male, aged 49. Died, unimproved, ten months after exploratory laminectomy.

Female, aged 22. Left hospital, unimproved, two months after removal of tumour, and was lost sight of.

Male, aged 64. Improved so much after partial removal as to be able to return to business, but after six months relapsed, and died ten months after the operation.

B. *Intramedullary Tumours.*

Male, aged 33. Incision of cord over tumour. Improved considerably and lived six and a half years.

Male, aged 59. Enucleation of tumour. Improved greatly, then relapsed and died two years and two months later.

Female, aged 45. Incision of cord over tumour. Some improvement at the end of three months.

C. *Extrathecal Tumours.*

Male, aged 33. Decompression of theca and cord. Improved very greatly and lived seven years.

Female, aged 58. Decompression. No improvement after two months; lost sight of.

Female, aged 60. Decompression. Greatly improved at the end of ten months; lost sight of afterwards.

Male, aged 41. Decompression. Slight improvement after four months.

It might seem from a cursory glance at these facts that surgery has little to offer in such cases. It is not easy to put into words, still less into tabular form, what these patients do gain by surgical intervention. The most striking benefit is the relief of pain, a benefit which in most cases is in itself sufficiently great to justify the operation. This is a palliative measure of the first importance. In some cases sphincter control has been improved, but I would not lay much stress upon this point seeing that in general the cases which have done best have been those in which there was little or no disturbance of sphincter function before the operation.

In several cases power and sensation have so far been restored as to enable a bedridden patient to get about and even for a few months to attend to his business. But in estimating the value of operative treatment, the subject of compression paraplegia must be considered as a whole. The causes, other than tumour, are many, and the differential diagnosis is difficult. Loculated collections of fluid (the "meningitis circumscripta serosa" of Horsley), post-gummatous stricture, simple encapsuled tumours, and cold abscess, are conditions which can often be diagnosed with certainty by operation alone, and all these are lesions after removal of which, if the cord has not been too long subjected to pressure, recovery is to be expected.

CONCLUSION.

The chief lesson to be learnt from the study of a series of cases of compression of the cord is that early exploratory operation should be more frequently undertaken. Neither should a clear history of syphilis nor the existence of a positive Wassermann reaction be considered as a contra-indication for operation should improvement not rapidly follow the administration of antisyphilitic remedies. For persons with active syphilis may suffer from spinal neoplasms (three out of fifteen of my cases of simple extramedullary tumour), whilst a constriction of the cord by fibrosis following gummatous meningitis, incapable of being influenced by drugs, may be successfully dealt with by operation.

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[1] Quoted by Horsley, *Med. Chir. Trans.*, lxxi. [2] Ibid.

PUBLIC HEALTH VERSUS THE STATE.*

BY

BERTRAM G. M. BASKETT, M.B., B.CH.OXON.,

RAYLEIGH.

NEARLY seven years ago I spoke at a meeting of this Division and prophesied that the sequel of the Insurance Act would inevitably be an increase in deaths from tubercle. I was called to order; it was ruled that any other aspect was irrelevant than that which had reference solely to the interests of medical men. I am here to-day not to say that my prophecy was true, for you all know that as well as I, but first to show the grounds on which my prophecy was founded, and secondly, to ask you to say that the ruling that such a topic was irrelevant was wrong, inasmuch as to have insisted from the first that the Act could not be in the interests of the public health would have averted the confusion of to-day, and completely frustrated the menace which now confronts the profession.

I may take it for granted that everyone will agree that it is a reproach to a civilized community that a preventable

* An address delivered before the South Essex Division, British Medical Association, October, 1919.

infective disease should be on the increase. It is bad enough if it is a newly discovered disease; the reproach becomes far worse in the case of an old disease, the way to check which has been discovered, and when the disease is increased by deliberate reversal of the process by which it has been checked. And when it is a disease which causes the death of some 1,500 persons per million, causes the disability of two or three for every one who dies in a given year, and is a disease whose cause is known, the reproach becomes a scandal.

This is what we have to say of tuberculosis in Great Britain. Its cause has long been known; it is an infective and preventable complaint; for fifty years it steadily and progressively decreased; and the decrease should have grown still more rapidly, so that by 1896 we had a right to expect, and did expect, the approaching extinction of tubercle as a serious factor in the national statistics. Instead of this we find that in 1896 the rate of decline reached its acme; that after this it became sensibly slower; that later it became stationary; and that in the end it began to rise again. Thus a rapid decline was interrupted by an increase, at first relative, then absolute; so that by 1915 the divergence between the two curves, namely, the actual curve, and that which continues the direction of the fall to 1836, amounted to 25,000 lives.

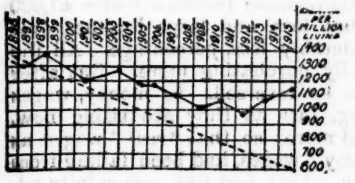

CHART I.—Tuberculosis, England and Wales: yearly rates. The broken line indicates the point which should have been reached if the old rate of fall had been continued.

I have designedly limited the inquiry to the end of 1915 because down to that date the war could have made little or no difference in the death rate of a disease lasting generally at least two and often three or more years. To test my theory I worked out as far as I could in 1916 what should be the result of the economic conditions then prevailing and promising to prevail. It was clear to me that among the civil population the artificial demand for labour was enabling, and would continue to enable, money wages to overtake the rise in prices; it seemed clear that the momentum of the previous increase before 1916 would only gradually cease to be operative, but that so the rise in the rate would cease. I felt indeed, and committed myself to the prophecy in writing, that there would probably be even a slight decrease in the rise in 1916, 1917, and 1918. About 1918 I do not yet know, but as to 1916 and 1917 I was right. The question is complicated after that time by the return of a number of soldiers to civil life, men of all ranks who have been exposed on service to the conditions which in less severe degree are the result of poverty in civil life, such as underfeeding, or feeding on materials lacking in vitamines, overcrowding, exposure to bad weather, depressing nervous strain, and the like. If that part of the population can be separated still, the result for a year or two more should probably be a still further but slight decrease. The question is highly complicated; one has to recollect that certain valuable foods were lacking in quantity, so that even raised wages could not purchase them towards the end. Probably no prophecy can be made with any confidence again till three or four years more have passed. If this theory is right, the rate must then necessarily increase again; or, if not the death rate, still tuberculosis must increase, and the more if expensive State measures continue to be passed. But we must note this very striking fact, that, on any orthodox theory, the tuberculous death rate should have been highest at the end of the war, as in Germany, Austria, France; what did happen here was that the increase was greatest at the beginning.

Of the official explanations of the rise, it is sufficient to state that all are different and none are satisfactory. The Registrar-General's explanation will not hold water for a minute. He insists that a rise in mortality of 12 per cent.—in women only—by the end of 1915 was the result of the rush to factory life before factory conditions were reasonably sanitary. But the rush did not begin until well on in that same year, and the mortality must have been due to disease contracted, on the average, two years previously. The Local Government Board explanation of influenza may be true for 1914 and 1915, but does not explain the fall before and after. And the worst epidemic of influenza in my experience was that in the early nineties, which conspicuously raised the tuberculous death rate for the time, but allowed the five yearly average to fall without apparent check. Such isolated facts as influenza will not explain a fall which, taken in five-yearly averages to avoid ephemeral phenomena, was constant for fifty years, and was succeeded for twenty more by a rise partly relative, partly absolute. Some common factor must be found which varies as the death rate has varied, or nothing has been explained. If such a factor is found; if nothing else will explain the mortality curve; if in addition to explaining the past, it makes it possible to forecast the future, then the conditions of a scientific proof have been fulfilled.

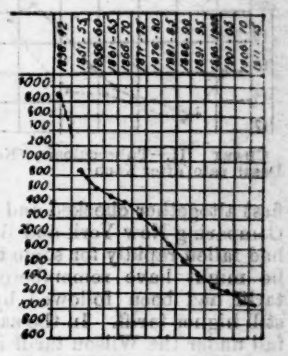

CHART II.—Tuberculosis, England and Wales, 1851–1915: five-yearly averages.

It is unfortunate that there is only one country, Great Britain, which has preserved quite reliable figures—with one break only early in the period—over so long a time as seventy years. Sweden has figures, with one important break from 1831–1860, reaching back to the decade 1751–1760; but as they were collected by the clergy I do not know how far they may be relied on. We have to find a theory which will account for the astonishing fall in the tuberculosis death-rate all over Europe, beginning in the forties with Great Britain, and extending till well on in the present century everywhere in Europe, with the exception of Ireland and Norway; and beyond the confines of Europe with the exception of Japan. We have to explain why a sparsely populated paradise like New Zealand, or a continent with a handful of population, the majority of whom lead the outdoor life, like Australia, should have higher death rates than a well populated country like Denmark; why a country like the German empire, with a most thorough state organization for stamping out tubercle, should have such disgraceful tuberculosis rates as 55 per 10,000 for Düsseldorf, 59 for Elberfeld, over 50 for Osnabrück and Cologne, and 50 for Munich; and why a continent like the United States, starting recently with a clean slate, and taking extraordinary precautions to exclude foreign-born tubercle, should now be involved in a desperate fight against the disease.

The conclusion that the more municipalities and the state have extended their sphere of benevolence the worse matters have become, is so contrary to our preconceived notions as to seem at first incredible. But if it be admitted, as I think it must, that poverty is the chief of many adverse factors, embracing nearly all these factors, producing national morbidity; and if it be recognized, as is the fact, that the distribution of wealth was steadily becoming more equable down to 1896, and that from 1896 to 1914 it steadily became less equable, then it must be allowed that my theory demands respectful consideration.

There is much to confirm it from foreign statistics. They are neither so long dated nor so trustworthy as ours; and of course it is exceedingly difficult to be sure of one's ground unless one can have the intimate knowledge of alien social conditions which one can have of one's own country. But from Koch's last paper on the subject I have been able to get several interesting charts which throw some confirmatory light on the question. He touches on most of the points to which I have referred, but oddly enough, though he repeatedly asks why there was the universal drop all over Europe (save in Ireland and Norway), and though he repeatedly emphasizes the importance of the environment of poverty, he never stops to ask whether economics have anything to do with it. As is natural with a German, the only solution which occurs to him is that more police are needed, though he is fain to confess that the best record comes from days before the disease was known to be infectious. Great Britain, he says, began in the race for improvement. A very little inquiry would have told him of the enormous improvement in real wages due to the introduction of free trade. The rest of Europe followed; he might easily have found

out that every considerable community in Europe lowered its tariff in response to Cobden's crusade. He might easily have found out that the wealth of Europe was enormously increased, partly through the development of steam and electricity, partly by reason of State policy, and found that the typical environment of poverty had been modified. As an object lesson of first magnitude he might have observed in his own charts of Hamburg, Berlin, and Prussia (as to which he says that it is the best of the confederate states) that during the Caprivi treaties, which were the German empire's nearest approach to free trade, the rates fell as never before, and that the Bülow tariff first altogether checked and then lowered the rate of fall. Comparing New York and Berlin, where in both the rate had fallen rapidly for some time and then slackened down, he might have remembered that similarly the Wilson tariff had been followed by the Dingley and then by a still higher tariff. In the same way in Massachusetts the fall under the Wilson tariff is distinctly checked after the higher Dingley tariff.

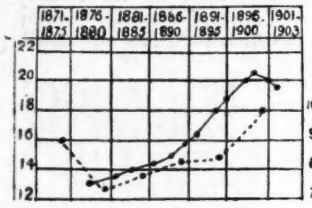

CHART III.—Tuberculosis, Norway. Death rate, after Koch.

I lay stress on the tariff as a factor because it is the one ready guide which a foreigner can have, except in such cases as the Massachusetts chart, where I was struck by a check to the fall in 1876 onwards, and looked up the history, to find that it was four years after the disastrous Boston fire, which was followed by a commercial crisis spreading over the whole state.

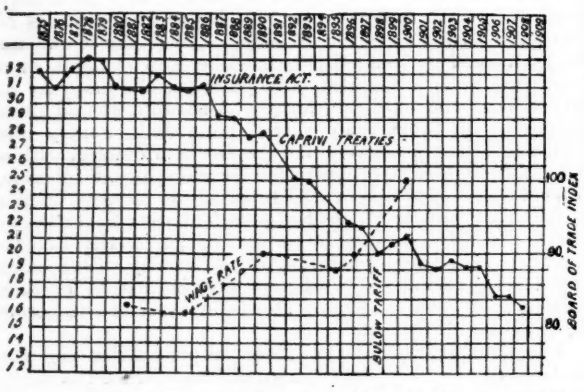

CHART IV.—Tuberculosis, Prussia. After Koch as regards death rate.

Clearly the fall all over Europe from the forties onward cannot be due to variable phenomena. It cannot be due to a biological or spontaneous variation such as occurs in other infective diseases, producing an autogenetic immunity, or leading, now to a virulent, now to a trifling, epidemic. On the contrary, we are all mournfully aware that in the individual case tubercle is as lethal as ever. Though probably far more cases are cured than used to be cured, we still have the residual cases and the more acute cases which seem at the end to have been hopeless from the start. It cannot be due to the increase of knowledge or of facilities for treatment, for the most startling diminution occurred before the cause was known or any politic means of treatment existed; and in Great Britain it remained for the most momentous increase in our records to occur after there had been a huge addition to both. Nor can it be simply that the tuberculous death rate has fallen because the general death rate has fallen; on the whole the fall of the latter has been much slower than that of the former. It is plain that some common factor must exist.

When, in devoting myself to free trade work, I had to study wage rates in various countries, and came to recognize the remarkable relation between a high tuberculous rate and a high tariff, it seemed to me that a flood of light had been thrown on the subject, and that poverty was at the root of the mischief on a national scale. Outside of military life during a war there is only one condition which connotes all the evils of bad environment, as insufficient or unfitting food, overcrowding, bad sanitary conditions, airless houses—namely, poverty. Every one who mentions the question of environment insists on the importance of poverty; and the Insurance Act took its stand, even in the case of so lukewarm a supporter as Mr. John Burns, on the importance of poverty.

Now, as all know, or should know, the "golden age" of the British working class was the fifty odd years from 1842–1896. The rise in money wages was enormous; there has been nothing quite like it in history, except once, for a shorter period, under the similar régime of Robert Walpole. From 1843 to 1834 the average income of a working-class family had risen in money from some £40 a year to £85 or £90; middle-class incomes under £1,000 had risen by a somewhat less, and large incomes over £1,000 by a very considerably less, percentage. All the time money was gradually purchasing more. But after 1896 the process began to be reversed. In money, wages have perhaps been rising, just as they are rising now. But prices have risen still more; so that "real" wages, as distinguished from "money" wages, had been falling from 1896 right up to the war. This fact was mournfully admitted by Radical ministers on every platform, although they were doing all they seemed to know to remedy the defect. The more they tried, the worse matters became.

The coincidence of the height of resistance to tubercle and the height of real wages must at once strike attention. If the yearly chart be closely looked into, indications will be noticed of the extraordinary sensitiveness of the tuberculous death rate as a gauge of real wages. The average case of phthisis may be taken as lasting two or three years; three or four years after political conditions which necessitate higher taxation, or cause distress and raised prices, it may be observed that the number of deaths, if not the death rate, rises for a time proportionate in length to the severity of the causative conditions. For instance, the revolutionary era in Europe is followed by a rise lasting till 1853; the Crimean war and the Indian mutiny are followed after three or four years by a rise in the number of deaths, though negligible in the rate. The American civil war is followed by a rise in the number of deaths which makes a perceptible difference in the rate. The Boer war is similarly followed by a rise.

But all these causes are trivial in degree compared with the rise in municipal rates and municipal debt which began in the nineties, to be followed later by the wildest extravagance on the part of the State; the excuse in both cases was the amelioration of the condition of the poor. By 1905 the municipal debt of Great Britain had come to rival the National Debt, and before the war the State revenue had come to exceed £200,000,000. The larger part of the money is obtained from the pockets of the poor, who, through higher prices, have to pay for State and municipal extravagances, not more in the shape of a protective tariff than in the shape of Workmen's Compensation, or of Old Age Pensions, or last, but not least, of Insurance Acts. In their blighting influence on the poor there is no difference between protection and State paternalism. It is indeed a significant fact that the very name in Australia for the highly developed system of the latter which it enjoys is "the new protection." The excuse in either case is that by benefiting chosen individuals at the cost of the community at large the community derives a benefit which more than compensates the cost. In Mr. Lloyd George's own phrases—to associations of employers—"Of course the consumer will pay; the producer will no more pay than he does under Mr. Chamberlain's Act. Where the consumer will gain is in increased efficiency." The effect, however, in either case is indirect taxation, which always hits the community, and hits hardest the poorest and most helpless portion. It does so by lowering "real" wages.

It will thus be seen that the inverse ratio of real wages and death rate is preserved right through the whole period. As wages rise—or, what is the same thing, as prices fall—the death rate falls; as wages fall off the fall in the death rate slackens; and the relation is so constant that the rise due to other causes—for example, epidemics of influenza—is absorbed and concealed by the five-yearly average of the falling rate prior to 1896. The momentum of the fall due to previous wages rise continues some time

after the cause has ceased to be operative in the previous degree. But after a time the new conditions show the effect clearly, and the Insurance Acts had an effect precisely similar to a big war or any other such economic calamity. This effect necessarily will be abiding; and if the Act remains on the Statute Book in its compulsory form its effect must slowly increase. As the result of increased taxation due to the war the death rate must necessarily increase again, the more so if expensive State measures continue to be passed. Out of many things which are doubtful one fact stands out indisputably and beyond cavil—namely, that the more municipalities and the State have extended their sphere of benevolence the worse matters have become. The conclusion is irresistible that the tuberculosis death rate ultimately depends on the cost of living to the poor more than on any other single factor. There are many others, but the one which has to be considered by the State is the problem of raising the "real" wage rate—in other words of lowering prices. And let us be under no illusion. Economic *laisser faire* benefits all classes but it benefits the poor most.

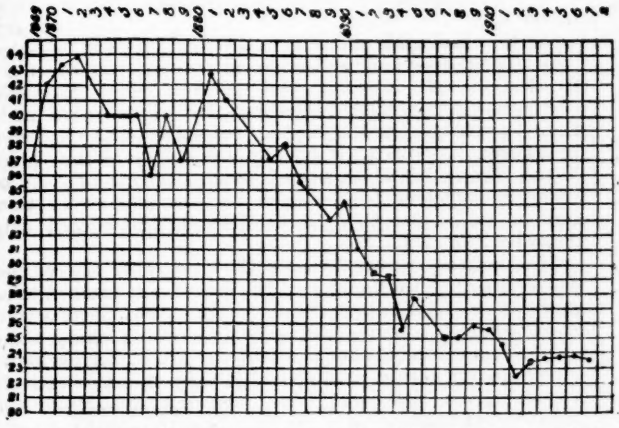

CHART V.—Tuberculosis, New York. After Koch. President Cleveland's Administration, 1885–90; McKinley Tariff, 1890; Wilson Tariff, 1893; Dingley Tariff, 1897.

To sum up: I have not found a case which contradicts the suggestion that if a government concentrates on the question of raising real wages it does more to eliminate tubercle than it can do by any other means. On the other hand, there are very distinct indications that when it sets itself by direct means, involving expense, to improve the conditions of the poor, the usual result is to encourage tuberculosis and raise its death rate, relatively if not absolutely. The Insurance Act enhances, and will go on enhancing increasingly, the cost of living to the very poor, and in this way will increase disease. A capital illustration of the absurdity of State regulation of wages was recorded in the press early in September. A master baker was forced to add 5s. a head a week to his five men's wages. He was allowed to charge ½d. a lb. extra for his bread. He made £18 7s. 6d., and his men 5s. each, as the result of State interference. So it is always when you attempt to override natural law. Every statute to lower the rate of interest in usury has raised it. Governments tried deliberately for one hundred years after the Black Death to lower wages; they only succeeded in raising them. For six years before the war they tried directly to raise wages. They only succeeded in lowering them. They have passed laws to prevent the private employer paying in truck; and justly. But they are perpetually passing laws to pay men in Government truck, and Government truck has nothing to recommend it as against private truck. As a prominent Forester said at the friendly societies' meeting the other day: "We can give for 1d. what the State charges 1½d. for."

I submit that there is no possible doubt that the Insurance Act operates to lower the value of wages. I submit that the grounds on which a rise in the death rate from tubercle was predicted as a result of the Act were just, and that there is a strong prima facie case for an inquiry. Now I want to say a few words as to why an inquiry should be instituted by the British Medical Association.

In the first place, in the frenzy now raging for the extension of State activities, which has lately been the invariable sequel of a war, it will be long before you will prevail on any Government to inquire whether its activity is not in itself a mischief. The recent extensions of the franchise, however desirable in themselves, cannot but have the effect of attaching a factitious importance to Parliaments and Governments for a period, depending on the time it takes to disillusionize the great body of the electorate. For example, working men rarely use the telephone or telegraph for themselves; they are paying in raised prices in order that these conveniences may be at the call of people better off than themselves, yet I have never heard of a working man raising his voice for the resale of either to private hands. Government is a fetish with them, and, as they are the driving force for the moment, there is little chance of such an inquiry at the instance of the State.

Moreover, for such an investigation it is imperative to have men of science who have no prejudices, no preconceptions, who care only for truth. There should be no party politics in such a committee. Many men among our ranks, especially in high places, have been smitten by the prevailing mania for officialdom, but it would be easy to find medical men without bias who would decide for scientific truth, and that only.

Another decisive reason for an inquiry by medical men is that we best know the facts and could start free from the embarrassment of a load of fallacies which the layman would have to learn painfully to discard. It would, for example, be no use to tell medical men that the Act brings treatment within reach of the poor, in any way where the old individualist method failed to supply it. You and I know that it was not poverty *per se* that was the bar. I can say for myself—and I am sure for everyone here—that never in my life have I refused to attend any person on that ground; the few times I have refused have been where I had reason to know that he *would* not pay if he *could*, not because he could not pay. Nor will Mr. George's pathetic illusion that the admittedly too great cost to the poor will be compensated by greater efficiency on the part of the service bear a moment's scrutiny. It is obvious to us, and should be to the public, that a system which makes the pay the lower the more diligently you attend, and the higher the less, cannot tend to promote efficiency.

Again, we know better than any other class the moral deterioration which has begun to work. Is there any man here who has not more than once heard the remark: "Well, they make me pay; I shall take care to get my own back"? It is perhaps a pardonable, certainly a natural, feeling; as towards a State undertaking it is surely an appalling one. But it is there; and at this juncture it is a dreadful menace to have people feeling and saying, as a woman said to me the other day: "Well, the State is rich."

There are many other facts of this kind, of the utmost value in the appreciation of such a scheme, best known, perhaps solely known, to us. There is no other class, except perhaps the district nurse, which enjoys so intimate a knowledge, or the confidence in so full measure, of the poor.

But more than all is the fact that it is *right* to inquire. These overgrown children in Parliament and in Government offices are deciding the fate of a nation without thought, without caution, with a single eye to the benefit, not of the nation, but of individuals in the nation.

Under the old conditions it was often painful to insist on payment from the poor. But every thoughtful man knows that in the long run it was good for the community to do so, except, of course, in special cases. Just as Octavia Hill, by rigorous insistence on her rents and friendly intimacy with her tenants, showed the solution of the housing problem for all time, and transformed some of the worst characters in London into respectable hard-working people who never, in the worst winter on record, amid general clamours for State relief all over England, went without a day's work, so we know that we were raising the standard of living of the poor, and ultimately raising the market rate of wages. But under the insurance scheme and the extensions proposed that burden is transferred to the community in general, which means that ultimately the poor will pay relatively most. Can you bear that the cost of the raising should come out of the suffering

of those who are least able to bear it? You remember what Brutus says:

> By heaven, I would rather coin my heart to gold,
> And drop my blood in drachmas than to wring
> From the hard hands of peasants their vile trash
> By any indirection.

The railway strike might have been devised on purpose to drive the fact home. Individuals in the pay of the State were to suffer, perhaps are suffering, and the demand arises from their fellows that at the cost of the State their suffering should be relieved. Our latest convert, and a most valuable one, Mr. Lloyd George, pleads that he is trustee for the public funds and cannot accede to the demand without grave injury to the public. He has at last learnt that to relieve poverty out of the taxes is but to increase poverty; that so to relieve a handful of railwaymen would be to impose a heavy burden on every other poor man in the kingdom; and that it is the bounden duty of a Government to resist with all its power the imposition of every additional penny of taxation. The principle, if not the amount, is exactly the same in our case. We ought to have, and must have, more; Government ought not to give more. The position is an impossible one. There is only one course open honestly to the State—namely, to abandon interference and to return to the old system which cost the community nothing—that is, because it was paid by the individual.

In that great book of Sir H. Maine's, in which every man should pass a rigorous examination before he sits in Parliament, he lays down an axiom which has attained instant and permanent acknowledgement—namely, that the history of progress has been the history of advance from status to contract. No human being can deny that the Insurance Act abolishes contract in favour of status for a very large portion of the community. A man who by law cannot contract freely is in status, and the status is that of a slave or a child.

And so we come back to the old motto—

> All constraint,
> Except what wisdom lays on evil men,
> Is evil.

To find it is not a mere political platitude, but a natural law, a profound political truth. Compulsion is not good even for children, except very naughty children. For honest grown men it is not only a crime, but a blunder. Leave it for criminals.

At the conclusion of the address the following resolution was unanimously adopted:

> That this meeting calls attention to the slackening of the fall in tuberculosis mortality from 1896 onwards, culminating in an actual rise in the death rate after the Insurance Act; and resenting its enforced association with a measure which prima facie seems, and on strict investigation may be proved to be, prejudicial to the national health, urges the Council of the Association to institute an inquiry into the effect of the Act upon the nutrition of the poor.

THE Reports of the Borough of Poplar Dispensary for the Prevention of Consumption for the years 1916, 1917, and 1918 have been received. Statistical analyses of cases attending, arranged under different heads, open each report. Attendances at the dispensary for the three years totalled 28,217. Of 539 contacts examined, 71 were regarded as tuberculous. Patients discharged as cured numbered 165. New features include the adoption of "a dried milk of high nutritive value" in lieu of the more expensive ordinary milk. The need of an open-air school is emphasized. Another requirement—a new *x*-ray installation—has been met.

THE calendar of the Faculty of Medicine of the University of Toronto for the year 1919-1920, besides containing the lists of names and information as to examinations customary in such calendars, contains in the issue for 1919-1920 a special notice to the effect that "The senate of the university has determined that the increase in the length of the undergraduate course in medicine from five to six years will go into effect in the autumn of 1919." This notice will apply to all students entering on and after that date, with the exception of those who have been prevented from entering their course during the war on account of their having been on military service.

REMARKS ON SCLERODERMIA.*

BY

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UNLIKE the names of many skin diseases, the word sclerodermia is not of ancient lineage; its introduction is, indeed, well within the recollection of most of my hearers. The insertion of the "i" before the last letter is to emphasize the fact that we have a definite disease of the skin and not merely a change in structure and texture, which the word "scleroderma" implies. A similar alteration is illustrated in the terms "pachydermia," or elephantiasis, and in "xerodermia," and for exactly the same reason. Parenthetically, I may observe that these descriptive terms ending in "ia" are feminine substantives, whereas the original ones are neuter.

The earliest account of this disease was given by Dr. Curcio of Naples, who apparently did not even bestow a name upon it. Willan, the English dermatologist and great terminologist, called it "ichthyosis cornea." Later Thirial of Paris introduced the term "sclerema adultorum" to describe the disease, and variants — for example, dermato-sclerosis, scleriasis cutis, scleroderma—soon made their appearance in the writings of subsequent observers in different countries. Popularly it is known as the "hide-bound disease," and this Anglo-Saxon term alone and of itself is sufficient to proclaim its existence from time immemorial, even though the first medical record only dates back to 1752.

It is rather curious to note that many of the earlier observers, after the fashion of the schoolmen, seemed to be more intent upon linking up this disease sclerodermia with elephantiasis arabum—pachydermia—and seeking some subtle connexion between the two, than in endeavouring to elucidate its nature. Indeed, it is only in comparatively recent times that we have freed ourselves from the thraldom of tradition in medicine. It is well that it should be so; on the other hand, although, owing to our progress in science, we may justly differ from our forefathers in their views of disease, yet there is a real danger that in coining new terms we may be misled to regard them as new knowledge. A great advantage would accrue to us if a short course on the history of medicine were instituted in our university. Nosological nomenclature alone would play an interesting, not to say fascinating, part in such a subject.

Under sclerodermia two types are described, the diffuse and the circumscribed. One of the cases now reported shows both types, and the other illustrates the circumscribed type only. The circumscribed type was formerly known as, and is still called, morphoea. It has been well described by Erasmus Wilson, who regarded the disease "as a faint trace of a worn-out disease, leprosy," once endemic in these islands. Later Addison described this circumscribed type as "keloid," deriving his term from the Greek κηλίς, a mark such as left by a burn. Hence the combination "Addison's keloid." Addison was at pains to show that the disease he depicted was the true keloid, and quite different from Alibert's keloid. Addison was right, but apparently overlooked the fundamental terminological confusion introduced by the two words with the same initial letter. Alibert, owing to the exigencies of French pronunciation, transliterated the Greek "χ" as a "k." The name was derived from the Greek χηλή, signifying a crab's claw, to which a fancied resemblance can be detected.† Certainly if we are to dispense with the French dermatologist's name, cheloid should be so written—with "ch." This terminological confusion is now a matter of historic interest, especially as Addison's keloid has been definitely recognized by modern writers as a localized type of sclerodermia, and the term keloid is passing into desuetude. Sclerodermia is not a frequent disease. I can call to mind only four examples that have come under my direct observation, and two of these are here this evening for your inspection. It is more often seen in females (nearly 75 per cent.), but no abnormality of the sexual organs has been brought into causal relation.

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* A paper read at the Liverpool Medical Institution.

† Cancroid, from the Latin "cancer," was also used as a synonym by French writers.

CASE I.

A schoolgirl, aged 12½, came to the Skin Department of the Royal Southern Hospital in February, 1919. She displayed at that time a white glistening ivory-like patch situated in the lower third of the left arm on its extensor surface. It was hard, and the skin could not be raised in folds; there was no itching, no pain, and no disturbance of sensation. There was impaired movement of the elbow, but the wrists and digits were freely movable and the skin in these regions apparently normal. A similar change in the skin was noticed in the left foot implicating the two outer toes and extending along the dorsum pedis to some four to five inches above the external malleolus.

Her mother stated that the child first noticed this condition during the summer holidays, July and August, 1918. She thought she had sprained her arm when playing with the maypole. The condition of the toes and outer margin of the foot and ankle was not noticed until November, 1918; but neither the patient nor mother can definitely state when or how the disease began, and these data are not therefore quite trustworthy. From February, 1919, to the present time sclerodermia has slowly extended, implicating the whole of the extensor region of the upper extremity. The flexor aspect of the limb is not involved, and over the biceps and flexors of the wrist and hand the skin is supple and apparently normal. The hand itself shows typical sclerodactyly. The scapular region is also involved, and here appeared slight ulceration, of which the cause could not be ascertained. This is now healed, leaving a scar like that of a burn. In April, 1919, two circumscribed patches, one in the left hypochondrium and the second in the umbilical region, were discovered, and have since undergone a certain degree of involution. This fact has been noted by various observers in the circumscribed type.

The present redness of the skin of the hand and fingers is referable to the cold weather, and does not suggest any connexion with Raynaud's disease, which some writers would appear to support. The morbid histology is briefly that of atrophy of the fibrous elements of the true skin and subcutaneous tissue. The elastic element is not involved. The blood vessels are atrophied, the result of interstitial inflammation of the walls. The glandular apparatus, as well as the hair follicles, show secondary atrophic changes. The epidermis is diminished in depth, but otherwise normal. I hope to show a microscopic specimen of these changes at a forthcoming pathological meeting.

The pathology of sclerodermia is unknown, and equally so its etiology. Of course, hypotheses are forthcoming, but no facts to support their validity. There is an angioneurotic hypothesis, a central nervous hypothesis, and an autotoxic hypothesis. I have no extra one to offer, and cannot explain sclerodermia. It cannot be referred to malnutrition, although the parents think that the food rationing in the early part of 1918 may have had something to do with its appearance. I have not read of any increase in sclerodermia among the inhabitants of Central Europe who have suffered immeasurably more from malnutrition than we.

Treatment locally and constitutionally has signally failed. It has not prevented the progress of the disease. Locally, linimentum potassii iodidi c̄ sapone, beloved of the surgeons, has been vigorously rubbed into the affected region for a month or so. This was followed by more stimulating liniments—turpentine and ammonia equal parts—for another month. Then successively the following ointments were used, but with no benefit: Unguentum acidi salicylici, unguentum hydrargyri compositum. At present, more from a massage standpoint of view, olive oil is being vigorously rubbed into the withered limb.

Internally fibrolysin was given hypodermically every week for three months. It made not the slightest impression. Fibrolysin is another name for thiosinamine, which is an organic derivative from oleum sinapis. It was introduced as a solvent or discutient of fibrous, and especially cicatricial, tissue in tuberculides and hypertrophic scars as a result of burns. In these cases, used as a plaster, I have noted great benefit. Since August, 1919, thyroid extract has been administered, 2½ grains thrice daily, and she is still taking this, but with no benefit as far as I can judge. The only point I can make is that during the last six months the disease has not extended. The withered condition of the left arm has become more striking owing to the atrophy of the muscles.

The blood has not been examined by the Wassermann test for syphilis; there is not the slightest clinical indication of inherited or acquired syphilis. Colonel Harrison returned the blood of a case of sclerodermia as positive; three other bacteriologists returned the same case as negative. According to Drs. Browning and Kennaway (bacteriological experts) the blood of every patient, no matter what the nature of the disease may be, should be submitted as a matter of routine to the Wassermann test. If this be a correct method of handling suffering humanity, then I plead guilty to this sin of omission. I have, however, serious intention of repairing the fault, for who of us knows nowadays that on a serological test he may not be declared to be possessed of latent syphilis which a Wassermann test has rendered patent! And, moreover, are not "606" and "914" potent remedies, and fit to be tried in diseases in which hitherto we have been impotent to cure? [A Wassermann test has since been made and reported negative.]

CASE II.

A woman aged 35, married twelve years, who has no children, but gave birth to a premature child at seven months which died shortly after birth, shows a patch of circumscribed sclerodermia in the middle of the bicipital groove of the right arm, from which a band extends along the ulnar margin of the forearm. She has had it for six years, and has only recently complained of weakness and impaired movement. She was sent to the Royal Southern Hospital by Dr. Humphreys in October, 1919. I ordered compound mercurial ointment to be rubbed well into the affected region, and probably it is due to the vigorous rubbing that she states she is much better, and has freer movement. The disease, at any rate, has made no progress during the last six weeks as far as I can judge.

In conclusion, I can but regret the futility of every medicament that has been used. It would have added greatly to the interest had I been in a position to say how the disease can be ameliorated, let alone cured.

MENINGITIS TREATED BY INTRATHECAL INJECTIONS OF THE PATIENT'S BLOOD SERUM.*

BY

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THE clinical features and the characters of the cerebro-spinal fluid in the following case leave little room for doubt that the patient was suffering from cerebro-spinal fever. The cerebro-spinal fluid was not examined until the eighth day of illness, and absence of meningococci so late in the disease does not, I think, invalidate the diagnosis.

The patient, a man aged 30, had always enjoyed good health except that two years ago, whilst serving with the heavy artillery in France, he suffered from "boils." In his last camp before demobilization many of his comrades suffered from influenza, but he escaped. He was demobilized about the middle of April, and on April 28th entered a gentleman's service as valet. At this time he seemed somewhat dull and lacking in energy compared with his former self, but had no definite illness until May 30th, when he shivered and complained of headache. The headache was accompanied by fever (103° F.) and photophobia, and for the next few days was so severe as to require morphine for its relief. On June 4th he complained of stiffness of the neck, and on June 6th a crop of herpes appeared about the nose and lips.

On the following day he was admitted to the Royal United Hospital. At this time there was slight retraction of the head, the posterior cervical muscles were very stiff, and the head could not be bent forward. With the thighs flexed at a right angle to the trunk the legs could be extended only to an angle of 135 degrees with the thighs. All the reflexes were normal except that the right abdominal reflex was much brisker than the left. The plantar reflexes were of the flexor type. The temperature was 102.2° F., the pulse 100, and the respirations 22. There was no optic neuritis, and the membrana tympani were normal.

The cerebro-spinal fluid was under considerably increased pressure and about 50 c.cm. were removed by lumbar puncture without difficulty. The fluid was turbid, clotted on standing, and contained 3,000 leucocytes (91 per cent. polymorphonuclear) to the cubic millimetre. Exhaustive search failed to detect any micro-organisms in stained smears. The urine was alkaline, turbid from the presence of bacteria, and showed a white deposit consisting of phosphatic crystals, leucocytes, epithelial cells, and a few erythrocytes; the bacteria present comprised Gram-negative coliform bacilli, encapsulated Gram-positive diplococci, and a short Gram-positive bacillus.

On the following day culture tubes of human blood serum agar and of Loeffler's blood serum inoculated the day previous with the cerebro-spinal fluid were found to have remained sterile, and as the patient's condition showed no sign of

* A paper read to the Bath and Bristol Branch of the British Medical Association.

amelioration but rather the reverse, the headache, Kernig's sign, and retraction of the head all being more pronounced, it was decided to try the effect of intrathecal injections of the man's own blood serum, in the hope that antibacterial substances might be present in sufficient quantity favourably to influence the supposed infection of the meninges.

Accordingly about 50 c.cm. of blood were removed from a vein in the arm into a bottle which was then allowed to stand overnight in ice-cold water; 20 c.cm. of the resulting serum, after being warmed by placing the container in warm water, were then slowly injected into the subarachnoid space by lumbar puncture after removal of the same quantity of cerebro-spinal fluid. This proceeding was repeated on the three following days; only 12 c.cm. of serum, however, was injected each day as the cerebro-spinal fluid was under less tension and no more could be conveniently abstracted. A further 5 c.cm. were injected two days later (June 14th). From June 9th 10 grains of helmitol were given every four hours until June 14th, when the appearance of a considerable quantity of blood in the urine led to its being reduced to 5 grains every four hours. This haematuria quickly cleared up, and though the urine contained a trace of albumin until June 21st it was subsequently free; there was no evidence to the naked eye of bacteriuria, and the reaction was acid.

On admission to hospital the patient gave the impression of being desperately ill, and for the next two days the symptoms increased in severity. Headache was intense, there was delirium at night, the retraction of the head and Kernig's sign became more pronounced, and flesh was lost at a truly astounding rate. Improvement set in from the time of the first intrathecal injection, though headache was still sufficiently severe to require morphine hypodermically on the nights of June 9th, 11th, and 13th, and he continued to lose flesh. On June 15th and 16th there was incontinence of urine. From this time a striking feature of the case was the rapidity of convalescence.

After admission to hospital the temperature kept between about 100° and 102° until June 14th, when it fell by lysis, becoming normal on June 18th. There was a rise the following day, June 19th, to 101°, but subsequently, except for an evening rise to 99° on June 25th, 26th, and 27th, it remained normal till his discharge from hospital on August 3rd. In September he resumed work as a valet and has since remained perfectly well.

The failure to find micro-organisms in the fluid withdrawn by the first lumbar puncture was repeated in examinations, both by smears and cultures, of that withdrawn on subsequent occasions.

Had cultures been available of the four different groups into which the meningococci most commonly met with have been divided by Gordon, it would, perhaps, have been possible by the agglutinative reactions of the patient's blood serum to have determined which particular group was responsible for his illness and to have administered the appropriate antiserum. As they were not available, it was decided to proceed as above, and though it may be urged that the mere removal of the cerebro-spinal fluid or the administration of helmitol, which by some is claimed to exert a bactericidal action in the cerebro-spinal fluid when given by the mouth, may be factors in producing the favourable result, the recovery—and perhaps one might add the rapid recovery—of a case which at one time appeared to be hopeless is recorded in the hope that the measures adopted may be of use in similar cases where the exact nature of the infecting organism cannot be ascertained.

McKenzie and Martin[1] in 1908 reported twenty cases of cerebro spinal fever treated by intrathecal injections of the patient's own serum or of serum from other patients convalescent from the disease. Of these four were chronic cases and all died. Of the sixteen acute cases ten recovered, and of these two were treated by injections of their own serum, though in what quantity is not stated.

In conclusion, my thanks are due to our president, Dr. King Martyn, for kindly supplying me with the details of the earlier period of the patient's illness.

REFERENCE.

[1] *Journ. Path. and Bact.*, 1908, xii, 539.

ACCORDING to the *Boston Medical and Surgical Journal*, it has been established that the sum of 15 million dollars must be raised throughout the country in order to carry out the work already begun in supplying food, clothing, and medical aid in countries devastated by the war and for continuing the health campaign.

MRS. H. M. PLAYER, of Redland Park, Bristol, who died in October last, has bequeathed £500 to the Bristol General Hospital and £250 each to the Bristol Eye Hospital and the Bristol Royal Hospital for Sick Women and Children. The Bristol Royal Infirmary is to receive the remainder of her estate after the various bequests enumerated in the will have been distributed.

FORGETTING: PSYCHOLOGICAL REPRESSION.

BY

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THOSE who devote themselves to the treatment of functional nervous disorders, especially so-called neurasthenia—which term as used by the services and the pensions boards really conceals various hysterical manifestations among which anxiety states predominate—are constantly confronted by the patient with the statement that doctors have advised him to pull himself together, exercise his will power, and forget all about the incidents which proved his undoing. Such an attitude was taken up by Sir William Hale-White,[1] who stated explicitly that "talk should never be about past war experiences," but the patient should be helped to forget them by the aid of easy games of cards, light reading, croquet playing, etc. It is unfortunate that, in spite of the experience gained during the war in the special military neurological hospitals, this attitude should be so prevalent. The forgetfulness thus advised is nothing other than repression, and psychological analysis invariably reveals the fact that the patient's anxiety condition is directly attributable to it. This is due to dissociation and displacement of the affect, which then tends to attach itself to suitably associated presentations.

The more successful he is in repress ng the memory of his unbearable experiences the more severe become his symptoms. Roughly, one may note three grades of repression or forgetfulness.

First, there is the degree in which the idea of the original incident is so unbearable to the ego as to be immediately and completely repressed. In this case the patient attempts to defend himself by complete amnesia for the event, which amnesia often includes, as an additional security, a considerable lapse of time in which the unbearable event is contained. For example, a patient may remember nothing after an explosion until he "comes to life again" in hospital a month or so later. Such a patient has most effectively practised the method of forgetfulness, but his condition is pitiable in the extreme.

One such case recently under my care was discharged from the army in 1916 as permanently unfit. Instead, however, of improving with lapse of time, he became progressively worse and had to give up work altogether. Recovery of the amnesia showed the unbearable incident to be that while lying semi-concussed upon a stretcher he had been robbed, and when he had offered such feeble resistance as he was capable of had been struck on the jaw and told to lie still. The recovery of the amnesia—in August, 1919—produced a remarkably steadying effect upon the patient. Other apparently forgotten events were subsequently in a similar way revived and the patient's attitude towards them readjusted, with the result that he lost his anxiety symptoms and has been comfortably back on full work for the past two months.

The second degree of repression is that in which a patient remembers and is able to talk about most of the events in his military life, but has incompletely repressed certain of them on account of their highly disagreeable nature. Cases of this sort are particularly apt to deceive one and thus run a protracted course.

As an example I might mention the case of a man who had seen three years' service in France and to all outward appearance carried on satisfactorily until slightly wounded just before the armistice, after which he had to be invalided home with "neurasthenia." With a little encouragement the patient could discuss his military history apparently in detail. A good deal of perseverance was required to bring to light the pathogenic event. This proved to be the death by shooting, under tragic circumstances, of a close friend with whom he was constantly associated as a sniper.

The resistance which the analyst experiences in bringing such a repressed incident to light is considerable, as is also the emotional reaction of the patient at the moment, but the rapid recovery which follows is equally gratifying to both parties.

The third degree of repression is found among pensioners to be the most common and the most troublesome to deal with. In it there is no event of particular moment; the subjects of it deliberately try to exclude the whole of their military service from their minds, and desire to live as though the experiences contained in it had never been. In this group of patients especially one may notice a latent period intervening between the disagreeable experiences and the onset of the symptoms. Thus, a considerable

number of the men in this group make no claim upon demobilization, their symptoms having developed later and after they had resumed civilian employment. Analysis of these patients generally shows that their powers of adaptation were never good, and that prior to military life they had a marked tendency to expect external conditions to be made comfortable for them rather than strive to adjust themselves and to dominate their environment. As their environment naturally refuses to comply they endeavour to ignore everything which does not suit them. When confronted with their failures, they tend to explain these as due to lack of physical strength on their part or as due to the injustice of a system or of persons with whom they were brought in contact. Here again treatment resolves itself into getting the patient to face external reality, to remember and assess his past failures, disagreeable experiences, etc., at their true value. The success or otherwise of treatment depends very largely upon the intelligence of the patient.

It should be borne in mind that the making conscious of the forgotten—repressed—material is only a necessary first step, our ultimate aim being to readjust and re-educate the patient. This cannot be accomplished while his mind is refusing either consciously or unconsciously to deal with past unpleasant experiences, for these tend to cast a baneful influence over all the reactions of his subsequent life; hence the necessity for the removal of the resistance.

Limitation of space forbids my entering into the psychic mechanism involved in these cases, but I have dealt with this more fully elsewhere.[2]

In conclusion, I would say that the remarks here made apply with equal force to civilian psychoneurotics, though the latter are as a rule more difficult to deal with, and require of the doctor a greater experience in the preliminary bringing to light of the repressed material. I feel that, at the present time, when so large a number of these cases are demanding treatment, it would be a great advantage if the profession as a whole realized the pathogenic effects of repression. The task of those who are engaged in the treatment of the conditions above referred to is rendered all the more difficult if the patient is fortified by medical advice in his efforts to forget.

REFERENCES.
[1] BRITISH MEDICAL JOURNAL, August 23rd, 1919. [2] *Brit. Journ. Psychol.*, vol. x, Part I.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

GASTRIC ULCER AFTER GASTRO-JEJUNOSTOMY.

IN the BRITISH MEDICAL JOURNAL of November 29th, 1902, I made a brief reference, among other cases of gastric ulcer, to that of a man, aged 51, from Lancaster upon whom I performed pyloroplasty and gastro-jejunostomy on December 12th, 1901, on account of two ulcers; one near the pylorus I excised, and did pyloroplasty to widen the narrowed pylorus. The other ulcer, deep in the pylorus, could not be excised owing to complicated adhesions, but as an additional safeguard gastro-jejunostomy was performed at the large curvature of the stomach. A very good report was made in my hospital case-book by the dresser, Mr. A. B. Sykes, now of Formby, near Liverpool. The man made a good recovery and continued in good health and vigour nearly three years.

However, a report was made to me by Mr. C. W. Dean of Lancaster that the man had died on August 14th, 1904, having been admitted moribund into the (now Royal) Infirmary of that town. *Post-mortem* examination showed perforation of a fresh ulcer of the jejunum, where attached to the stomach. This last illness had lasted a couple of days, and the man might have had a chance if he had applied at first, when an operation would have been done, with good prospect of success, by the Lancaster surgeon.

The remarkable thing about this occurrence was the ulceration of the jejunum at its point of attachment to the stomach, and entirely away from the two gastric ulcers previously relieved.

Liverpool. RUSHTON PARKER.

TREATMENT OF DELIRIUM TREMENS.

DR. F. WYATT-SMITH'S note in the BRITISH MEDICAL JOURNAL of December 6th, 1919, raises several interesting points. Before the war it was my lot in twenty years of asylum work to treat many cases of this disease, and I cannot recollect one that did not respond to the old mixture of potassium bromide 30 grains, chloral hydrate 20 grains, and tincture of digitalis 10 minims, every four hours, with a calomel and saline purge to start with; nor do I remember losing a case, unless complicated by pneumonia. But since whisky drinking has become expensive the disease has practically vanished.

Dr. Wyatt-Smith's remarks on hyoscine and sulphonal should not be allowed to pass without a warning. Hyoscine hydrobromide is the most reliable sedative in states of acute excitement, and in doses of $\frac{1}{100}$ grain, combined with $\frac{1}{3}$ to $\frac{1}{2}$ grain of morphine, is my sheet anchor in such cases. But I have notes of three cases in which hyoscine given over extended periods had a cumulative effect, ending fatally.

Dr. Wyatt-Smith says he never met anyone who had seen a case of haematoporphyrinuria the result of sulphonal. I have had three cases in my own experience, two ending fatally. One was in the early days of sulphonal, when it was boomed as an absolutely safe hypnotic, and occurred in the case of a strongly built girl the subject of chronic mania. She had sulphonal in 20 grain doses night and morning for some weeks, developed haematoporphyrinuria and died. The other fatal case arose in a young man after only two doses of 20 grains each, and was obviously due to an idiosyncrasy to the drug. I have also seen alarming coma result from a single dose of 20 grains in a woman. She was unconscious for twenty-four hours and needed strong stimulation with caffeine, etc., to bring her round.

I find veronal in doses of 7 to 10 grains preferable in every way to sulphonal and now rarely employ the latter drug. It is of the utmost importance, when prescribing any of these drugs over extended periods, to keep the bowels well open.

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Medical Superintendent, Plymouth Borough Asylum.

Ivybridge, S. Devon.

CALCIUM CHLORIDE AS A HAEMOSTATIC.

A SHORT time ago (November 8th, 1919, p. 597) Dr. Gwillim Davies related a case in which he had used calcium chloride with success as a haemostatic. On the first occasion he injected from eight to ten grains of the salt in solution into the gluteus, and on the second four grains. He mentioned that he was indebted to Dr. W. R. Grove of St. Ives for a knowledge of the value of the drug in this respect. We have received a communication from Dr. Grove expressing the opinion that the doses given by Dr. Davies were unnecessarily large, and, in fact, bordering on the unsafe.

Dr. Grove described his method in the *Guy's Hospital Gazette* of May 18th, 1918. He uses a solution of fused calcium chloride made up 1 in 4. If, as is the case when hard water is used, there is a precipitate, this is shaken up. Four minims of the fluid are drawn into the syringe, and boiled hot water is drawn up afterwards to the 20 minim mark; this is injected deeply into the gluteal muscles. The injection is painless. Dr. Grove has sometimes made the injection in patients who have been going about; these got slight stiffness afterwards down the leg. No external signs remained. He states that some years ago, at a meeting of the Cambridge Medical Society, Professor Dixon pointed out that while the value of salts of lime for increasing the coagulability of the blood was well known, their absorption from the intestine was practically *nil*. He therefore suggested a hypodermic injection, and recommended a dose of 1 grain. The hypodermic injection, however, produced sloughing of the skin, and therefore it must be given intramuscularly. Dr. Grove states that he has used the drug in the dose and in the manner described not only in haemoptysis, but also in haematemesis, in a case which presented signs of peritoneal haemorhage after abdominal hysterectomy, and has found it useful also in certain cases of metrorrhagia. He states that it will be found of value in ruptured extrauterine pregnancy, before operation, and in typhoid haemorrhage. He also mentions having used it in a case of aortic aneurysm with apparent benefit. He points out that evidence as to the rate at which the salt is

excreted would be helpful; from clinical evidence he thinks that the blood soon returns to normal. Again, he asks whether, in old people with roughened arteries and a liability to thrombosis, it is safe to use the method. He also raises the point whether it would be better to use a still weaker solution.

Reports of Societies.

UTERINE CANCER.

AT the last meeting in 1919 of the Section of Obstetrics of the Royal Academy of Medicine in Ireland, Dr. BETHEL SOLOMONS showed two specimens: (1) a carcinoma of the cervix; (2) a sarcoma of the uterus.

The uterus in the first case was removed by Wertheim's method from a woman of 31. She consulted him because of sterility. On examination he found a nodule in the cervix; he removed this, and the pathologist reported it to be an epithelioma. It was then necessary to decide between vaginal hysterectomy and Wertheim's operation. The disadvantage in the former was that the vagina was extremely narrow; the disadvantage in the latter was that the woman was very fat. After due consideration the abdominal operation was determined on, and after a Pfannenstiel's incision the operation was speedily accomplished. He dwelt on the advantage of this incision in fat women, as the fat area was avoided.

The second specimen removed was from a woman of 60 who complained of a stinking discharge, wasting and cachexia. On examination a tumour about the size of a six months fetal head was found in the vagina. This was removed by morcellement, and on reaching the cervix it was found that the os uteri admitted two fingers and the uterus was filled with a fetid tumour. The latter was removed with the spoon forceps and the uterus curetted. There were several pounds of the tumour, and the pathological report was giant-celled sarcoma. On examination of the patient after the removal of the tumour it was found that the uterus was fixed and that the growth extended to the right pelvic wall and evidently involved the intestines. The disease was so advanced that no further operation was possible. The patient was greatly relieved and there was no discharge.

Sir WILLIAM SMYLY agreed that in cases where cancer of the cervix had been diagnosed with certainty, even where the disease was very limited in extent, the most radical method possible should be employed.

Ovarian Insufficiency.

Dr. ASHE read a paper on ovarian insufficiency as a probable cause of epilepsy. He advocated the administration of glandular extracts in suitable cases.

Dr. SOLOMONS said he thought hypodermic medication of glandular extracts was probably an improvement on oral administration. He had had great success with corpus luteum extract, also with some of the combined extracts—for example, hormotone and ovo mammoid. He still felt that endocrine therapy was rather "a shot in the dark," and he hoped investigation would soon put endocrinology on a sounder basis. He had met many cases of epilepsy in connexion with menstruation, and he had found that some were benefited by glandular extracts, others by ergot, and others by anti-anaemic and anti-constipation remedies.

Sir W. SMYLY remarked on the importance, in young women, of preserving both ovaries if possible, because though it might appear that one would suffice, yet subsequently, as in one of the cases mentioned, it also might have to be removed. As to treatment by glandular extracts, he thought there was more likelihood of obtaining definite knowledge by the hypodermic injection of one than by the simultaneous introduction of half a dozen into the stomach.

Schultze's Forceps.

Sir W. SMYLY gave an exhibit of Schultze's forceps. He maintained that Schultze's spoon forceps, though not now such an important instrument as it was when first introduced into practice upwards of a quarter of a century ago, was still one of the best means of removing submucous myomata, whether pedunculated or not.

Dr. BETHEL SOLOMONS said that he found the original Schultze's forceps a most useful instrument. The absence of the lock made morcellement, which was sometimes a tedious operation, a quick one. He saw the advantages in the increased weight and in the lock devised by Sir William Smyly, but so far he was satisfied with the lighter instrument without the lock.

Reviews.

THE GREAT WAR AND THE R.A.M.C.

THE first volume of the popular medical history of the war, or *The Great War and the R.A.M.C.*, by Lieut.-Colonel F. S. BRERETON,[1] deals with the narrative of events during the first two months of the war. As pointed out in a short preface by Lieut.-General Sir John Goodwin, the author has had access to official documents and diaries so as to ensure accuracy.

The first two chapters give a general account of the Army Medical Service, and show the improvements, such as the sanitary sections with specialists in the destruction of flies, that produced the phenomenal contrast between the toll of disease, especially enteric fever, in the South African war and in the years 1914–19. The organization and various units of the R.A.M.C. are described and illustrated by a diagram, and by tracing the sick or wounded man from the front trenches to England. The failure of horse transport, which rendered the field ambulances immobile in the retreat from Mons, led to the substitution of the motor ambulance with incalculable benefit to the wounded. It is sad that the parsimony of the Government and the narrow outlook of ignorant individuals had blocked the Director-General's recommendation for motor ambulances before the war. The casualty clearing station—a new unit—to which the field ambulances passed the sick and wounded, proved to be a vital link in the medical arrangements, and again and again justified its establishment. The great debt of gratitude to the British Red Cross Society under the guidance of Sir Arthur Stanley and to the Order of St. John of Jerusalem is graciously acknowledged.

After a brief but graphic description of mobilization in August, 1914, the detailed narrative starts. The cavalry field ambulances were naturally the first of the medical units to smell powder, about August 22nd, but the first casualty in the British Expeditionary Force was four days earlier, when two flying officers suffered disaster at Peronne on the Somme. The story of the terribly exhausting retreat from Mons gives a pathetic interest to an account of the hard and conscientious work of the R.A.M.C., crippled by the need for motor ambulances, which led to the capture of a number of medical officers who remained with the wounded; whereas the Germans, whose transport was similarly deficient, left their wounded exposed and unattended in the action of the Marne.

The reader passes with relief from the account of the retreat from Mons to the advance over the Marne after von Buelow and von Klück had been obliged to retrace their steps. The advance over the Marne showed practically for the first time the excellence of the British Field Ambulance, and during this week of rapid movement the scheme of evacuation so often practised on peace manœuvres was carried out successfully. The description of the operations of the Second Division at the crossing of the Aisne contains an account of the heroic deaths of Lieut.-Colonel O. Dalton, Captain H. S. Rankin, and Lieutenant Huggan. The appendices give the staff of Surgeon-General Sir T. P. Woodhouse, the D.M.S. in France, who sailed with the Expeditionary Force in August, 1914, and the official report to the British Government on the horrors of Wittenberg.

In conclusion, a running summary of the military events accompanies the account of the movements of the R.A.M.C., and provides a most interesting and clear description on which Lieut.-Colonel Brereton may be heartily congratulated.

GENITO-URINARY SURGERY.

DURING the last six months or so a great number of books on venereal disease have been published, but the majority, it must be said, have added little to our knowledge of that important subject. In Major N. P. L. LUMB's book, *The Urethroscope in the Diagnosis and Treatment of Urethritis*,[2]

[1] *The Great War and the R.A.M.C.* By Brevet Lieut.-Colonel F. S. Brereton, R.A.M.C. London: Constable and Co. 1919. (Pp. 300; 9 maps and 2 appendices. Price 12s. 6d.)

[2] *The Urethroscope in the Diagnosis and Treatment of Urethritis: A Contribution to Urethroscopy.* By Major N. P. L. Lumb, O.B.E. R.A.M.C.(T.C.). London: J. Bale, Sons, and Danielsson, Ltd. 1919. (Demy 8vo, pp. 63; 40 illustrations. 10s. 6d. net.)

we are glad to welcome a work that should prove of real use to those engaged in the treatment of gonorrhœa. It achieves its purpose, which is to furnish a practical guide to urethroscopy, and more especially a guide to the use of the urethroscope in the control of treatment. Instead of emphasizing, as has too often happened in previous works, the rarities encountered in the urethra, the author wisely directs attention to the lesions found in everyday practice. He also shows the changes in the appearance of these lesions after appropriate treatment, such as dilatation. The merit of a work on urethroscopy lies in the illustrations rather than in the letterpress, and both Major Lumb and his publishers are to be congratulated on the quality of the coloured plates in this work. One small criticism may, however, be made. While engaged in studying the letterpress the reader is compelled to do a considerable amount of turning over of pages in search of the appropriate illustration; some of this trouble might possibly have been avoided by a different method of arrangement. However, the interspacing of coloured plates is always a difficult task, and this minor inconvenience will not divert attention from the general excellence of Major Lumb's work. It may be commended to all who are on the look out for a practical guide to the diagnosis and treatment of urethritis by means of the urethroscope.

In writing his book, *An Outline of Genito-Urinary Surgery*,[3] Dr. G. G. SMITH has aimed at presenting to students and general practitioners a clear and concise summary of symptomatology, patho'ogy, and treatment. Genito-urinary surgery has made such great advances during the past two decades that it can have been no easy matter to have kept such a work within narrow limits. Nevertheless the author has covered the ground with remarkable completeness, and has brought together within a comparatively few pages a vast amount of useful information. A handbook of this kind, if it is to be kept within prescribed limits, must of necessity be written in a somewhat dogmatic style; the author cannot afford space for the presentation of alternative theories and views of treatment. It would be easy, therefore, in reviewing such a work to pick out statements that are open to criticism, but this would scarcely be fair when the object of the author is kept in mind. Although genito-urinary surgery as it affects the general practitioner is the main topic, enough detail has been given concerning the major surgery of this region to allow the reader to gain a very fair knowledge of its indications, its aims, and its dangers. For those who desire further information on any of the subjects under discussion the author has appended to each chapter a useful list of references. The illustrations and plates are of the high quality maintained by so many of the better American textbooks, and contribute in no small way to the value of the work. Altogether it should be most useful to all practitioners in search of a compact and readable outline of genito-urinary surgery.

NOTES ON BOOKS.

ANNUALS.

THE 1919 edition of that most useful reference book, *Burdett's Hospitals and Charities*,[4] appeared towards the close of the year; it contains some 250 pages more than its immediate predecessor, though the price is the same. The thirtieth year of issue of the work has been full of anxiety for the managers of voluntary hospitals and kindred institutions, and it is therefore natural that Sir HENRY BURDETT should devote a good deal of the introductory matter to the present and future of the voluntary system. He recognizes that in the period now approaching the field of charity must expect much reorganization and many modifications and changes. The first chapter discusses the volume of charity in the British Isles, with tables showing the income and expenditure for 1916 and 1917 of the hospitals, dispensaries, homes, and so forth, of which particulars are given in the subsequent sections. The opening chapters taken together give a full account of the financial position of the voluntary institutions in the British Isles, and of the general effect upon them of the war. The editor remains full of hope and confidence for the future of voluntary hospitals, but he is very contemptuous of the way in which the sponsors of the National Insurance Act failed to provide for the hospital requirements of the insured population. "British men and women entitled as insured persons to medical benefits under the Acts were thus placed in the humiliating position, which Germans of both sexes had refused to occupy, of being recipients of charitable relief, if and when they could obtain it, which in practice was seldom or never." This is a hard saying, and not quite easy to reconcile with his praise of the voluntary hospital system. The main body of the work—some 800 pages—provides the customary detailed directory of institutions, both at home and abroad. The volume, as a whole, is a mine of accurate yet condensed information.

That section of *Whitaker's Almanack* for 1920[5] which deals with foreign countries reflects the changes brought about by the Versailles Peace Congress, and also, as was inevitable, the confusions and uncertainties which still remain, especially with reference to Russia and Arabia. The information, however, is very complete and for the moment accurate, so far as we are able to judge, save that the maps with which it is most usefully illustrated do not appear to be in all cases quite consistent. The article on France has been revised and brought up to date, and we find new articles on Czecho-Slovakia and on Sérbia, which appears with extended territory and under a new name as Yugo-Slavia. There is a new section on questions of the day touching on a great variety of subjects; they range from the Channel tunnel to the Trade Union Congress, and from the movement for the prohibition of alcohol to research associations, although we fail to find the Medical Research Committee either here or under the Ministry of Health, to which it is at present attached, nor under the Department of Scientific and Industrial Research, where we thought we might find it in a temporary resting place. The earlier part of the volume is arranged in the same way as before, and is as comprehensive and accurate as daily experience leads us to expect. We feel bound, however, once more to say that the table of medical fees is misleading, and has now become less accurate than ever it was. Nevertheless, the Almanack, taking it altogether, is an indispensable desk companion.

The New Hazell Annual and Almanack[6] for 1920 contains a great deal of current general information, clearly printed, and well arranged, though it is a little disconcerting to find the last page of the section on religious denominations rounded off with a tabular list of bankruptcies in 1918. The year-book is now edited by Mr. T. A. INGRAM, M.A., LL.D., and appears as one of the Oxford University Press Publications. The particulars with regard to education, pensions, honours, and aviation are especially full. The new articles in this edition include a summary of the peace treaties with Germany, Austria, and Bulgaria, and the text of the covenant of the League of Nations, and of Labour's charter under the League; sketch maps are given of the new Germany and the new Austria as fixed at Versailles. The volume forms a useful reference book and record of events.

We have received from the Incorporated National Union of Manufacturers a copy of their *Directory*,[7] in which will be found descriptive and classified lists of purely British manufacturers of commodities of every class. The book contains much information that should be of service to those who wish to promote British trade.

[3] *An Outline of Genito-Urinary Surgery*. By G. G. Smith, M.D., F.R.C.S. Philadelphia and London: W. B. Saunders Co., Ltd. 1919. (Post 8vo, pp. 301; 71 figures. 12s. 6d. net.)

[4] *Burdett's Hospitals and Charities. 1919, being the Year Book of Philanthropy and the Hospital Annual.* By Sir Henry Burdett, K.C.B., K.C.V.O. Thirtieth year. London: The Scientific Press, Ltd. 1919. (Cr. 8vo, pp 1071. 12s. 6d.)

[5] *Whitaker's Almanack for 1920.* By J. Whitaker, F.S.A. Lond. 1920. Fifty-second annual issue. (6s. net.)

[6] London: H. Frowde, and Hodder and Stoughton. 1920. Thirty-fifth year of publication. (Cr. 8vo, pp. 925. 6s. net.)

[7] *National Union of Manufacturers (Incorporated) Descriptive and Classified Directory of Members.* Compiled to July 1st, 1919. London: National Union of Manufacturers. (Cr. 8vo, pp. xii + 241. 5s. net.)

IN a report compiled by Jordan and Sons (Chancery Lane) of companies registered during the half-year just ended, it is stated that "patent remedies . . . do not appear to be in great request"; nevertheless, fifteen patent medicine companies, with an aggregated capital of nearly half a million, were registered. The activity of the publishing trade is shown by the fact that 115 companies were registered in London and twelve in Edinburgh or Dublin, with an aggregated capital of over two and three-quarter millions. Chemical companies registered—consisting, no doubt, chiefly of chemical manufacturing concerns—numbered 186, with a capital of nearly five millions.

British Medical Journal.

SATURDAY, JANUARY 10TH, 1920.

LONDON'S OPPORTUNITY.

IN discussing, a few weeks ago, the grievance which exists for the majority of London medical students in that they cannot obtain a medical degree, we recalled that Sir Alfred Keogh, in the article he wrote for the *Proceedings*[1] of the Special Clinical and Scientific Meeting of the British Medical Association held in London last April, claimed that the Imperial College of Science and Technology in South Kensington was in fact a three-faculty university, and asked whether there was not in the history of the Kensington movement an example which might well be followed by the London medical schools.

The Kensington movement went a little further forward when a deputation from the Imperial College had an interview with Mr. Balfour and Mr. H. A. L. Fisher last month, to point out the position of the students of the College with regard to university degrees. Lord Crewe, who headed the deputation, said that the students of the College suffered in competition with those holding degrees, and pointed out that there were three courses open. The one was that the Imperial College should be constituted a university, with faculties in science and technology but without other faculties usually found in a university; the second, that it should be empowered to grant its own degrees as a college; the third, that it should be enabled to award degrees of some other university, presumably the University of London, on the sole testimony of the College professors. Adoption of the third course would mean either that the College would cease to have the independence and elasticity with regard to the curriculum which it regarded as fundamentally important, or that the same degrees would be given for two entirely separate examinations; that course, therefore, it was hoped would not be adopted. He urged, on the other hand, that though the limitation of faculties in a university or the grant to a college of power to award degrees were novel in this country, they were not unprecedented. The College was not actuated by jealousy of the University of London, but was convinced that the present position was hampering the higher form of education with which it was entrusted. Greater London, with a population of 7¼ millions, was, he argued, as much entitled to two universities as Lancashire with 4¾ millions or the West Riding of Yorkshire with 3 millions. Mr. Balfour, as was to be expected, made a non-committal reply, but promised that both he and Mr. Fisher would give the fullest and most serious consideration to the matter.

Mr. Balfour was concerned in the matter because, as Lord President of the Council, he is the Minister responsible to Parliament not only for the grant of charters to universities, but also for the work and expenditure of the Department of Scientific and Industrial Research, and will, we hope, before long be similarly responsible for the Medical Research Committee. It is a happy circumstance that at this time Mr. Balfour should be the Minister on whom these responsibilities rest, for the bent of his mind enables him to appreciate the needs of science; his long experience in the greatest offices of the State has provided him with many instances of the immense services science can render to the nation, and there is no man in public life whose guidance in such matters will be more confidently accepted by public opinion—

> Statesman, yet friend of truth! of soul sincere,
> In action faithful, and in honour clear,
> Who broke no promise, serv'd no private end,
> Who gained no title, and who lost no friend.[2]

Already during the few weeks he has held his present office Mr. Balfour has taken several opportunities to show his sympathy with the aspirations of scientific men with regard to education and research.

Clearly there is a close parallelism between the position of the institutions which have combined to form the Imperial College and of their students on the one hand, and the position of the medical schools in London and their students on the other. The difference lies in the complete absence until quite recently of any financial support by Parliament for the medical schools. Even now the financial support given is on a very small scale. As early as 1858 the demand for scientific education had gathered force enough to induce the Government to establish a School of Mines; gradually there grew up in association with its special work, scientific teaching in other subjects; this was consolidated and systematized in the Normal School of Science, which eventually, in 1890, became the Royal College of Science, and was incorporated with the Royal School of Mines. Meanwhile the corporation and guilds of the City of London had established their Technical College; so that at South Kensington there existed three colleges—the Royal School of Mines, concerned to give a scientific and technical education to those intending to engage in the mining industry; the Royal College of Science, providing systematic instruction in the various parts of pure science; and the City and Guilds College, devoting its energies to applied science and technology, especially in relation to civil and electrical engineering. The charter of the Imperial College of Science and Technology was granted in July, 1907, and it has developed its activities in various directions. There are in the department of biology alone five professors, with staffs and laboratories, dealing respectively with botany, zoology, applied physiology and pathology, the technology of woods and fibres, and entomology. Arrangements have been made in all departments for special courses of advanced lectures of a post-graduate character, as well as for the extension of research facilities.[3] There is therefore a great deal of justice in the Rector's plea that the College is virtually a science university, since it provides the vocational training of men intended for the professions of chemistry, engineering, economic biology, and so on; and, as he said also, there is in the story of the history of the Imperial College a lesson and perhaps a model for medicine. "Combination, discipline, establishment of principles have carried Kensington as far as it has yet gone. Similar efforts in London medicine should lead to similar results." The Imperial College would, we make no doubt, prefer the first alternative Lord Crewe mentioned—namely, to be constituted a university. There are objections to such a plan, and they will no doubt have considerable weight with the Privy Council and

[1] Published by the British Medical Association, 429, Strand, W.C. 2. Price 3s.; members of the Association are entitled to a copy free.

[2] Said by Pope of the younger Craggs, and applied by Joseph Chamberlain to Mr. Balfour, October 15th, 1902.

[3] *Calendar of the Imperial College of Science and Technology, London, for 1919-20.* London: Eyre and Spottiswoode, or through any bookseller. 1s.

the Board of Education. Their force would be diminished if the medical schools in London were quickly to come together and put forward an appeal that, under the new conditions brought about by the establishment of university hospital units with the help of money voted by Parliament, they should be formed into the medical faculty of the university the Imperial College desires.

THE TOXIC EFFECTS OF ARSENO-BENZOL PREPARATIONS.

IN a recent publication of the Medical Research Committee's Special Report Series, Surgeon Lieutenant-Commander s R. J. G. Parnell and P. Fildes give a clinical study of the toxic reactions following the intravenous injection of novarsenobillon, or neokharsivan, into 1,250 men at the Royal Naval Hospital, Haslar, between October 18th, 1917, and June 30th, 1918.[1] The great majority of the men were suffering from the early stages of syphilis, and they were practically all treated on the same plan—that is to say, six doses of 0.45 gram were given by intravenous injection, with two clear days' interval between the doses. Toxic results ascribed to the drug alone occurred in 55, or 4 per cent., of the 1,250 men, of whom 23 had more than one reaction, so that there were 78 reactions, or about 1 per cent., among 6,588 injections. It appeared that these toxic symptoms were specially likely to occur with the administration of the third dose, and that if no reaction occurred then the probability of a subsequent reaction was considerably reduced; in other words, if the first three doses do not contain sufficient toxic material to produce symptoms, it is unlikely that the man will be susceptible to further doses. This observation militates against the commonly expressed view that the toxic reactions are due to accumulation of arsenic in the body from a too rapid succession of doses, for, if this were true, the later doses should be increasingly often followed by reactions.

The authors point out that two groups of symptoms following the intravenous injection of salvarsan preparations must be distinguished from those caused solely by the arsenic; these are the endotoxic reaction and "water fever." The first is almost certainly due to the sudden liberation of endotoxin from the spironemes by the destructive action of the drug; they are to a greater or less extent constant after the first, and are occasionally seen after the second, injection in cases of early untreated syphilis; there is pyrexia, usually starting six to ten hours after the injection, and there may be a chill or nausea or vomiting; but the temperature becomes normal in a few hours and there are not any further bad effects. The other form of reaction, known as "water fever," which at one time constantly occurred, is ascribed to the presence of protein derivatives from the bodies of bacteria in the water before sterilization. This reaction can be avoided by sterilizing the water immediately after distillation and using it within a short time of opening the sterile flask. The water fever starts very soon after the injection, often within half an hour, and when a large injection has been given there is often a rigor and there may be cyanosis and severe general symptoms. Analysis of the toxic symptoms due to the arsenic showed that fever occurred most frequently (in 85 per cent.), and varied in its onset and course; in one instance it persisted for fifteen days. Skin lesions, usually erythematous or macular, were noted in 69 per cent., headache in 60 per cent., suffusion of the eyes in 47 per cent., vomiting (usually associated with skin lesions) in 27 per cent., oedema and pains in various parts of the body each in 16 per cent., jaundice and albuminuria each in 3.6 per cent. No fatal case is recorded.

Before the introduction of salvarsan remedies benign jaundice was known to occur in the early stages of syphilis and had been estimated to supervene in 0.3 per cent. Recently the incidence of this jaundice has attracted more attention; thus, among 39,377 military cases of syphilis treated by salvarsan preparations, it was reported in 0.56 per cent.[2] Jaundice appearing after intravenous injections of salvarsan is usually ascribed to the effect of arsenic on the liver, but Milian[3] insists that the real cause is syphilitic hepatitis, and that for its cure the administration of mercury by the mouth, so that it may be absorbed from the alimentary canal and conveyed in considerable quantities to the liver, is much more satisfactory than intravenous injection of salvarsan. In the pre-salvarsan era acute atrophy of the liver was known to supervene on the early stage of syphilis, but it was extremely rare; in 1909 Dr. Parkes Weber collected 53 cases, and in some of these cases the condition was subacute rather than acute. Since the introduction of salvarsan remedies these fatalities have become less rare, and during 1918 a number of cases were reported by MacDonald, by Fenwick, Sweet and Lowe, by Veale and Wedd. More cases were recorded in 1919; thus Strathy and Gilchrist[4] observed seven cases confirmed by necropsy, and described a characteristic *x*-ray picture, the upper surface of the liver being more dome-shaped than normal, so that the organ becomes pudding-shaped or helmet-shaped, and the angle formed by the junction of the shadows of the upper surface of the liver and the vertebral column acute instead of the normal right or obtuse angle. A case presenting some special features and giving rise to some interesting comments has recently been recorded by Stewart, Vining, and Bibby.[5] The patient, a young woman aged 21, received four injections of 0.45 gram each of galyl (tetraoxydiphosphaminodiarsenobenzene), and rather more than two weeks after the fourth dose was jaundiced for two days, looked ill, and was tremulous. Three months after the last dose of galyl she was given a general anaesthetic (ether) for the removal of labial condylomata, and died an hour later without recovering consciousness. The necropsy showed a large fleshy thymus weighing 17 grams, and, though this suggests that death may have been really due to lymphatism and not to the grave changes in the liver, the authors, while mentioning the notable enlargement of the Malpighian bodies in the spleen, state that no conspicuous lymphatic glandular enlargement was present, and, possibly wisely, do not adopt this view. The liver was small, weighed 38 oz., and showed typical red and yellow atrophy, the latter greatly predominating. There was evidence of much new formation of bile ducts, but none of regenerative hyperplasia of the liver cells. Chemically the liver contained an insignificant trace only of arsenic. The appearances closely resembled those seen in the fatal toxic jaundice due to trinitrotoluene, except that the

[1] Medical Research Committee. Special Report Series, No. 41. H.M. Stationery Office. To be obtained through any bookseller. Price 3s. 6d.

[2] Medical Research Committee. Special Report Series, No. 44. Report of the Special Committee upon the Manufacture, Biological Testing, etc., of Salvarsan and of its Substitutes, p. 35. 1919.

[3] Milian, *Bull. et mém. Soc. Méd. des Hôp. de Paris*, 1919, 3me sér., xliii, 821.

[4] G. G. Strathy and L. Gilchrist, *Bull. Canad. Army Med. Corps*, 1919, i, 120.

[5] M. J. Stewart, C. W. Vining, and J. P. Bibby, *Proc. Path. Soc. Great Britain and Ireland*, 1919, 120-2; *Journ. Path. and Bacteriol.*, Cambridge, 1919, xxiii.

fatty degeneration of the existing liver tissue was much more prominent and that there was no evidence of biliary stasis. The hepatic changes were regarded as directly due to the galyl, but it is noteworthy that jaundice was transient and that clinically there was no suspicion of hepatic disease. The authors incline to the view that the patient was on the way to recovery when the general anaesthetic produced such an effect on the already injured organ that death immediately ensued.

In connexion with the hepatotoxic action of galyl and other arseno-benzene preparations, emphasis is laid by Stewart, Vining, and Bibby on the clinical and pathological resemblance of these cases to the toxic jaundice due to poisoning by trinitrotoluene, dinitrobenzene, and trinitrophenol (picric acid); and, as the chemical group common to all these substances is benzene or one of its derivatives (toluene or phenol), it is suggested that this group is the essentially toxic factor as far as the liver is concerned.

PATERNALISM OR LAISSER FAIRE?

THE doctrine of "laisser faire" dates from Colbert, one of the greatest financiers who ever controlled the affairs of a big nation. Dr. Arthur Shadwell has recently given the reference to Colbert's words; they were: "La liberté est l'âme du commerce. Il faut laisser faire les hommes qui s'appliquent sans peine à ce qui convient le mieux."

The address given by Dr. Baskett, of Rayleigh, to the South Essex Division of the British Medical Association, published at page 40, is a disquisition on the application of Colbert's dictum to a particular case. His argument may be stated as follows: To ensure internal peace and prosperity in a nation real wages should be high. They are high under conditions of "laisser faire." Government paternalism is the antithesis of "laisser faire," and increases taxation, which is always passed on to the masses of the people. Thus any increase of taxation reduces real wages, for however much nominal wages are increased they are always in the position of trying to catch up the increase in the cost of living, which increase is magnified by any rise in taxation. Dr. Baskett then goes on to argue—supporting his argument by reference to history—that real wages are lowered by corn laws, by protection, and by Government schemes for bettering the lot of the poorer industrial classes, because all such legislation involves extra taxation. He believes that the Insurance Act was an example of such legislation, and that the bulk of the cost of the National Insurance scheme comes ultimately out of the pockets of the poorer industrial classes, and therefore lowers real wages. He takes tuberculosis as a typical "disease of poverty," which in one sense it is, since underfeeding undoubtedly appears to increase its incidence. His contention is that the statistics prove that tuberculosis mortality varies inversely with real wages. He shows that for the fifty years before 1896 the mortality from tuberculosis in this country fell steadily and progressively, and we think he is right in saying that it was expected that after 1896 the rate of decline would continue even more rapidly, and that the hope that tuberculosis would disappear as a serious factor in the national statistics did not then seem altogether unreasonable. This hope has not been fulfilled; the rate of decline was interrupted by an increase, at first relative, then absolute.

Dr. Baskett limits his inquiry to the end of 1915, so that the effect of the war, whatever it may prove to have been, is not a disturbing influence. It must, of course, be remembered that the effect of the increased incidence of tuberculosis is only seen in mortality statistics two years or so, on the average, after the rise in incidence really begins. Those persons who died of tuberculosis in 1915 must on the average have contracted the disease in 1913—that is to say, before the war. At the same time it must be remembered that those who died in 1913 must, on this showing, have contracted the disease in 1911—that is to say, before the Insurance Act was passed. Dr. Baskett, however, does not maintain that the Insurance Act was more than one of the causes of the diminution in the rate of decline of tuberculosis. He associates it with increased taxation generally, due to increase of State and municipal expenditure, of which part is traceable to Workmen's Compensation, Old Age Pensions, and the Insurance Acts. This paternal policy, he holds, has lowered real wages, depressed the standard of living, and thereby raised the incidence of tuberculosis, which is a "disease of poverty." He finds much to support his view in the experience of other countries, and arrives at the general conclusion that when the fiscal policy of a Government includes protection, or when it sets itself by direct means, involving expense, to improve the conditions of the poor, the usual result is to encourage tuberculosis and raise its death rate relatively, if not absolutely; he deduces the particular result that as the Insurance Act enhances the cost of living to the poor it must take a share in the increase of tuberculosis due to the lowering of real wages.

Dr. Baskett, it will be seen, has the courage of his opinions, and it is to be noted that in discussing economic questions he speaks as an expert. He was at one time secretary of the Cobden Club, which is the great defender of free trade principles. With some readers this circumstance may prejudice the argument he presents, but it must be treated with respect, for it is the result of lifelong study. He had no difficulty in convincing his fellow members, and the South Essex Division of the British Medical Association, before which the address was delivered, adopted a resolution to the effect that there was a prima facie case justifying the institution of an inquiry into the effect of the Insurance Act upon the nutrition of the poor.

MEDICINE AND GOVERNMENT.

THE article published at page 56 tells briefly, but for the first time, we believe, in a consecutive manner and with sufficient fullness, the truth about the early history of the Medical Department of the Local Government Board. It makes plain the handicap with which the department started, owing to the subordinate position into which it was thrust. It is perhaps unnecessary to point the moral of the story, which puts our boasted capacity for efficient administration in a rather melancholy light. We hope with confidence that a new spirit inspires the Ministry of Health, and that within it the broader needs of health will not be placed in an inferior position through the growth of any particular subdepartment, such as that now concerned with housing. The forty-eighth and last annual report of the Local Government Board calls attention to certain resemblances between the position now, and in 1871. The Act which established the Local Government Board was designed "to concentrate in one department of the Government . . . the supervision of the law relating to the public health, the relief of the poor, and local government." It is pertinently remarked that "an observer unacquainted with the domestic history of the intervening

period might have heard with surprise the speech in which a Ministry of Health Bill was commended to the House of Commons in February, 1919. The main object of this bill, the House was told, was to concentrate the more important responsibilities of central government in matters affecting the health of the people in the hands of a single Minister, and by doing so to create 'a necessary instrument,' 'a vital and essential instrument' for improving the health services of the country. Had not the same main object, it might have been asked, underlain the legislation of 1871? and what were the reasons, in spite of all that had been achieved since the central authority was then created, which necessitated the proposal of 1919?" The circumstances, it is said, do not afford an example of the circular motion of history, but "illustrate the tendency of English institutions to persist in growing with a freedom which necessitates periodical pruning and adjustment." It is this free growth that has made it necessary to recast the central administrative machinery so as to enable it to carry out the conceptions of 1871 in accordance with the rapidly growing needs and standards of to-day. The first Minister of Health is not likely to repeat the mistake of the first President of the Local Government Board; but we must hold fast to the principle that in a Ministry of Health medical opinion, founded on research, investigation, and experience, must have the determining influence. Medicine must be free to develop its powers for the benefit of the nation, not forgetting that "the price of liberty is eternal vigilance."

THE ORIGIN OF TUMOURS.

IN an earlier discussion on the constitution of mankind Professor Hugo Ribbert had propounded the view that, while no certain knowledge can be obtained of the mode of origin of inherited characters, we have no grounds for supposing that a hereditary abnormality could appear *de novo* in any single ancestor of a family group. From the nature of the process we are compelled rather to refer its origin back to still earlier progenitors. Pursuing this line of thought, he came to the conclusion that transmitted abnormalities, like normal properties, are a latent legacy to mankind in general, and that though recessive in most individuals, they are dominant in a few. Ribbert now (*Deut. med. Woch.*, November 13th, 1919, p. 1265) applies this view to the consideration of neoplastic growths. It is admitted that the extent to which tumours may be recognized to be hereditary varies greatly in different instances. In some—for example, neurofibromatosis or multiple chondromata—heredity is frequent and obvious; while with other types—ovarian cystoma and even carcinoma—it appears from time to time. Apart from such evidence of transmissibility, however, it appears certain that, of simple tumours, a large number can be derived only from a congenital abnormality. It is difficult to believe that a delimited, autonomous growth, composed of apparently normal fat cells, blood vessels, striated muscle fibres, or chromaffin cells of the suprarenal, can be produced by any form of irritant in the widest sense of the term, acting during adult or even during embryonic life. These tumours must find their origin in a germ composed of cells which during early development have become separated structurally and functionally from their natural sphere. Ribbert evidently believes that the isolation of these tumour germs is a hereditarily transmissible character which may be expressed to a greater or less degree by all tissues. In the application of this view he goes further than has generally been accepted regarding the relation of embryonic rests to tumour growth, as he maintains that unless an embryonic rest has been present in a part no tumour can develop. Even in relation to the carcinomata the same proposition is maintained, although it is admitted that frequently its applicability in this form of tumour is less obvious. In some carcinomas—for example, rodent ulcer or carcinoma developing from papilloma—it is a sufficiently probable view. A difficulty for the theory is presented particularly by carcinomas which arise at the site of action of some known irritant, such as *x* rays or in sweep's cancer; but it is pointed out that carcinoma is not an invariable sequel to these special forms of irritation, and that when it does develop it is generally from a single focus, and never as a general carcinomatosis of the whole affected area. The contention, therefore, is that it is only in certain spots that cells are present which have the faculty of cancerous growth in response to the irritant, and that in absence of such cell-groups no tumour appears. Possibly failure hitherto to produce cancers by continued irritation may thus be explained. The article crystallizes into a very definite and complete form a hypothesis which must have been entertained at one time or another, and in more or less fully developed fashion, by many investigators of the subject since the time of Cohnheim, and it must be admitted that it contains at least as much probability as any other hypothesis that has been made regarding the etiology of tumours. As Ribbert himself points out, this view, if correct, leaves us no hope of being able to control or prevent tumour growth, except in so far as we can diminish the incidence of recognizably dangerous forms of irritation, and these, unfortunately, seem to account for the few and not for the majority of morbid growths.

ANTHRAX INFECTION BY BRUSHES.

WE published last week (p. 25) some information supplied to us by Dr. Henry T. Maw with regard to the origin and prevalence of anthrax in this country at the present time. Dr. Maw referred particularly to the danger due to the importation of foreign-made—especially Japanese—brushes used for medical and toilet purposes, such as throat brushes, toothbrushes, and shaving brushes. The Ministry of Health now announces that in the last few weeks several cases of anthrax have occurred in this country, two of which have been fatal, and that in a substantial proportion of these it has been found on inquiry that the infection was from new shaving brushes recently imported from Japan. In consequence of this, samples have been taken by the Ministry from several consignments of Japanese shaving brushes which have been found to be infected with anthrax germs. As several consignments of these brushes have now been distributed throughout the country, it is impossible for steps to be taken to discover them all, and no test of samples would provide adequate safeguards. Retailers and individual purchasers of shaving brushes are therefore advised to consult wholesalers or dealers as to whether an assurance can be given that the purchase is not one of a batch recently imported from Japan; without this assurance such brushes must be viewed with suspicion. The Government, it is added, is taking steps with regard to the further importation of shaving brushes.

UNIVERSITY GRANTS COMMITTEE.

IT will be remembered that last June the Treasury, in consultation with the President of the Board of Education, the Secretary for Scotland, and the Chief Secretary for Ireland, appointed a University Grants Committee "to inquire into the financial needs of university education in the United Kingdom and to advise the Government as to the application of any grants that may be made by Parliament towards meeting them." Sir William Osler accepted nomination to the Committee, but after further consideration resolved some months ago to retire. His place has been taken by Sir Wilmot Herringham, K.C.M.G., consulting-physician to St. Bartholomew's Hospital. While the war was still in progress the Government had come to the conclusion that the existing provision for aiding university education must be increased and consolidated. A survey of the needs of the universities showed that a

considerable increase in the parliamentary grants was urgent, and that the allocation of the grants could best be determined on the advice of a single body which could consider the needs of university education throughout the United Kingdom. The intention is that the method of distribution shall be such as to give the individuality of each institution free play and safeguard the legitimate interests of university autonomy. In the estimates for this financial year—April, 1919, to March, 1920—the annual recurring vote for universities and colleges in the United Kingdom was raised to £1,000,000,[1] and a special non-recurring vote of £500,000 was made "for special grants in aid of certain universities, colleges, medical schools, etc., to assist them to re-establish their work on a basis of unimpaired efficiency" after the war. In these amounts the grants for agriculture and training of teachers are not included; they will continue to be made by the Board of Agriculture and the Board of Education respectively. The annual sums allocated to the different institutions will take the form of inclusive block grants to be expended at the discretion of the governing bodies, will remain fixed for a prescribed period of years, and will be reviewed at the end of those periods. The University Grants Committee, which will maintain contact with the other Government bodies concerned, will be directly responsible to the Treasury as the authority with financial jurisdiction extending over the whole of the United Kingdom. The grants will be paid by the Treasury. The Committee now consists of Sir William McCormick, LL.D., chairman; Dr. William Bateson, F.R.S., formerly Professor of Biology at Cambridge; Sir Dugald Clerk, K.B.E., F.R.S., until recently Director of Engineering Research to the Admiralty; Sir J. J. Dobbie, F.R.S., Principal of the Government Laboratories, London; Miss S. M. Fry; Sir Wilmot Herringham, K.C.M.G.; Sir F. G. Kenyon, K.C.B., Director and Principal Librarian of the British Museum; Sir Stanley Leathes, K.C.B., a Civil Service Commissioner; and Sir J. J. Thomson, O.M., F.R.S. President of the Royal Society.

[1] The total includes £29,700 for intermediate education in Wales.

THE LONDON SCHOOL OF TROPICAL MEDICINE.

THE London School of Tropical Medicine will, it is hoped, be able to begin work in its new central premises before the end of this week. The house is a lofty building of eight stories, at the south-west corner of Euston Square, and abuts at the back on a part of the buildings of University College. It is a new building, but it has already been used at various times as a nursing home, a hotel, and during the war as an officers' hospital. The upper stories are being arranged as wards, and a large number of small wards will be provided, which, it is believed, will be found very convenient for the special class of cases the hospital will receive. On the middle floors laboratories are being provided for the several departments of the School, and offices for the Tropical Diseases Bureau, which will shortly be removed there. The joint library of the Bureau and the School will be placed on the ground floor, with a book store in the basement, where also will be a common room.

MEDICINE IN BOLSHEVIST RUSSIA.

A CORRESPONDENT has published in the *Medizinische Klinik*, Berlin, for October 26th, an account of conditions in Russia as they affect the medical profession. It appears that, with other cultured classes, the doctors of Russia have suffered greatly since the outbreak of the Bolshevist revolution. They were numbered among the "bourgeois," and of the various accusations hurled at them the chief was that only the rich benefited by their treatment. The first doctors to suffer under the Bolshevist Government were those in public departments, such as prisons and factories. They lost their positions, and were supplanted by so-called medical assistants, or by army surgeons; between these there was naturally much friction. In private sanatoriums the lower members of the staff only demanded higher salaries, but in the Government hospitals, or in such military hospitals as still survived, more serious conflicts often arose, and doctors were daily attacked and imprisoned. The position of the doctors in military hospitals became dependent on the goodwill of their subordinates. The medical administration department ceased to act, and its office was usurped by a special medical commission in the local Soviet. The private practitioner suffered also; his fees were not raised, and the number of private patients grew very small. In the winter of 1918, for instance, doctors were found who still received only from two to three roubles for a visit. Well known professors were spared this distress, as they retained their high fees; later they were numbered by the Bolshevists as among the "grand bourgeoisie." The cultured classes as well as artisans refused to recognize any necessity for higher remuneration for medical work. With the gradual rise in the wages of workmen and officials came an increase of salary for the medical officers employed in public positions. This, together with increased food rations for medical men in official posts, attracted many doctors, including older members of the profession, to the Bolshevist government. In the spring of 1918 many of the cultured classes took part in communal affairs, and many doctors entered the newly formed Red army, in which no special declaration of solidarity was demanded of them. They were obliged only to declare themselves neutrals. The doctors were exempted from the wholesale arrests of the summer of 1918. The outbreak of cholera at this time obliged the Government to take various sanitary precautions, and these included an increase in the number of State medical officials. But the terrible scarcity of food, which drove the poor and hungry to search for something eatable even in the dust heaps, hindered and retarded any effective control of the disease. The Bolshevists and the doctors were able to combine peaceably in purely medical work; but disagreed when obliged to form joint committees. When the inhabitants of every town were classified, the Government placed the doctors in the third class, among such as were of little use to the community. They were thus placed on the same footing with lawyers and artists. The persons in this third class received a weekly food ration barely sufficient for one day. On this account the doctors were most thankful when allowed to receive their fees in kind. When, in October, 1918, the measure for lodging the proletariat in the houses of the rich was enforced, two rooms were allotted to each doctor for the pursuit of his calling.

HISTORICAL SURGICAL INSTRUMENT CASES.

As was announced in the JOURNAL of December 6th, 1919, Professor A. Keith has displayed in the museum of the College of Surgeons Dr. Livingstone's surgical instrument case brought back with his body from Africa; it will be on view till the end of January. Mr. Alban Doran, at Dr. Keith's suggestion, has arranged by its side several similar boxes of instruments, that have been on their travels with more or less illustrious surgeons and spent many years in inglorious retirement, forgotten, in the instrument room. Dr. Robert H. A. Hunter's army surgeon's case was used by him all through the first Afghan war; he marched in 1838–39 through the Bolan Pass to Cabul, returning by Quetta and Kelat. The case was recently presented to the College by its late owner's daughter, Miss Hunter. There is also in this group a navy amputating case once belonging to Joseph Bellot, who first saw service in H.M.S. *Pegasus* in 1789; his nephew gave it to the College in 1873. Beside it is the case of a French army surgeon who was killed in Egypt in 1801. It was presented to the College in 1811 by Surgeon-General Thomas Kent; Mr.

Clift, then Conservator, clearly suffered from the insular prejudices of his day, as in his note in the catalogue he speaks scornfully of the instruments, which show "the miserable state of hardware manufacture in Paris." Experts in surgeons' cutlery, however, have examined them recently and found that the steel is good and the workmanship excellent. Mungo Park's surgical pocket case is also on view; he lost his life in Africa in 1806, but before leaving England in the course of the previous year he gave the case to Sir Anthony Carlisle "for a professional memento"; Carlisle gave it in 1816 to Mr. Bartley, of Mitcham, Surrey, for his kind attentions to a sick relative. Mr. Bartley's daughter presented it to the College. Lastly comes a case containing a saw, knife, and catlin set in agate handles, and an ivory tourniquet, a beautiful sample of old-fashioned surgical cutlery; unfortunately, the name of neither its owner nor donor is recorded.

SCANDINAVIAN MEDICAL JOURNALS.

THE well known *Nordiskt medicinskt Arkiv*, first published by Axel Key of Stockholm in 1869, is appearing in a new guise. Henceforward the journal is to be divided into two parts, known respectively as *Acta medica Scandinavica* and as *Acta chirurgica Scandinavica*. The editors hope that by giving their papers a neutral, Latin, name they will make a wider appeal. Under the old title would-be readers have been put off by taking it for granted that the contents would be in a language quite unknown to them. They have thus missed a number of scientific contributions of the greatest value. The contents are in English, French, or German, according to the author's predilection or choice. The editors of *Acta* hope to be able to publish papers from foreigners in all countries, according as room may be found for them. The journals are therefore of interest to everyone, and, judging by the numbers which we have already seen, the standard of scientific work published is likely to be high. Norway, Sweden, Denmark, and Finland furnish assistant editors and committees. It is to be hoped that their desire to overcome their geographical isolation from the great English and French speaking nations will meet with the warm response which it deserves. Anyone who has travelled in Scandinavia will agree with us when we say that we have many temperamental characteristics in common with the peoples of those countries, and that nothing but good to all concerned can come from a closer scientific liaison between us. The editor of *Acta medica Scandinavica* is Professor I. Holmgren of Stockholm, of *Acta chirurgica Scandinavica* Professor Einar Key, also of Stockholm. The journals are published by P. A. Norstedt and Son of the same city in an attractive format; price 20 Swedish crowns, six numbers to the volume.

THE FRENCH ARMY MEDICAL SCHOOL.

THE French Army Medical School at Val de Grâce, the regular educational functions of which were suspended during the war, recently resumed its ordinary work. The returning students were welcomed by the director, Dr. Jacob, in the presence of a large assembly of distinguished members of the Paris Faculty. M. Jacob said that the medical service had lost between 4 and 5 per cent. of its personnel but it had achieved success. Typhoid fever, which was severe in 1914, was overcome during the early months of 1915 through antityphoid vaccination. The net result was that in this war the number of deaths from wounds was very much larger than the number of deaths from disease. M. Toubert related the history of the Abbaye of Val de Grâce, which was transformed into a military hospital in 1793, when France was menaced by enemies on all frontiers. The Military Governor of Paris, in bringing the ceremony to an end, said that the Army Medical Service had deserved well of the country by maintaining the number of effectives and keeping constantly in repair the weapon with which victory was achieved.

DIPLOMA IN MEDICAL RADIOLOGY AND ELECTROLOGY.

THE growing importance of physical methods of treatment especially electro-therapeutics and the remedial use of *x* rays, is now generally recognized. This is shown by the movement to give full staff rank to the medical officer in charge of this department of hospitals. The subject indeed becomes more complex every day, and calls for the whole-time services of the worker. It is important, therefore, that this branch of medicine should be kept only in trained and competent hands. *The Archives of Radiology and Electro-therapy* for December, 1919, in describing the results of the work of the British Association of Radiology and Physiotherapy, announces the now accomplished fact that the University of Cambridge has instituted a diploma in medical radiology and electrology, the first examination for which will be held in July, 1920. The regulations for the diploma are printed in full, as is also the required course of study, the syllabus of subjects, the fees payable, etc. A course of instruction in physics and electro-technics begins at Cambridge on January 20th, and in electrology on the previous day, to be followed by a course of lectures on radiology beginning on April 26th. Most of the well known workers on these subjects are to take part in the teaching, at any rate during the first course of instruction, and arrangements are made for lectures to be given both at Cambridge and in London. The importance of this new departure is evident; it means that the whole subject of physical medicine shall take rank fitting to its importance in the domain of medicine, and appropriate to the research which has been made on the effect of radiations and of electric currents upon living things. It should also ensure a supply of well-equipped specialists for various hospital posts, and prevent men practising this branch of medicine without ample previous training. Full particulars can be obtained from the secretary to the university committee for the diploma, Dr. Shillington Scales, Medical Schools, Cambridge, and from Dr. Robert Knox, 38, Harley Street, London, W.1. The University of Cambridge is to be congratulated upon its foresight in instituting this diploma.

POST-GRADUATE COURSE IN VENEREAL DISEASE.

WE are asked by Mr. E. B. Turner, F.R.C.S., chairman of the Medical Committee of the National Council for Combating Venereal Diseases, to state that a post-graduate course of instruction in the diagnosis and treatment of venereal disease is being arranged by Mr. Kenneth Walker, F.R.C.S., officer in charge of the venereal department of St. Bartholomew's Hospital. The course will be given at the venereal centre established by the Corporation of the City of London, in Golden Lane, and medical men who wish to take advantage of the scheme are asked to forward their names to the Medical Secretary, National Council for Combating Venereal Diseases, 81, Avenue Chambers, Southampton Row, London, W.C.1. It is proposed to hold the course on Thursday afternoons, at 5.30, and to limit the number of those attending to fifteen. Should the scheme induce more practitioners to apply, the course will be repeated; thus the first fifteen names will be accepted, and other applicants will be referred to a future course. Illustrative cases from the various clinics will be shown. The first course, to be limited to male practitioners, will probably start towards the end of this month.

WE regret to learn that Sir Thomas Fraser, F.R.S., Emeritus Professor of Materia Medica and Clinical Medicine in the University of Edinburgh, died on January 4th. Sir Thomas Fraser, who would have attained the age of 79 next February, retired from the active work of his chair in the spring of 1918.

THE EARLY HISTORY OF THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.

In the recently issued forty-eighth and last annual report of the late Local Government Board is given a short account of the circumstances which led to the establishment of that Board in 1871. In this connexion it may be useful to recall some of the facts relating to the early days of the Medical Department of that body, and how the intention of those responsible for setting up a new Central Health Authority was defeated by the Board itself, and a great opportunity thus lost for improving the national health.

It is undeniable that this unhappy result was, to a large extent, due to the unfortunate combination of public health with the relief of the poor in the work assigned to the new Board. The old Poor Law Board furnished the Local Government Board's first president, secretary, and assistant secretaries; moreover, almost the whole clerical staff, along with the Poor Law inspectors, were transferred from the old to the new Board. The Local Government Board was thus, practically, the old Poor Law Board under a new name. The latter Board had had no medical department or medical adviser of its own, though it had been obvious for some time to competent observers that such a department was urgently required, if the interests of the sick poor were to receive due attention. The medical staff of the Privy Council, from 1858 to 1871 the central health authority for England and Wales, was transferred to the Local Government Board under Mr. (afterwards Sir John) Simon, its chief medical officer, of whom it may with truth be said that he did more than any other worker of the Victorian era to prevent disease and to prolong life. He had been medical officer of health for the City of London, and had been appointed later medical officer to the Central Board of Health, and, still later, to the Privy Council. For more than twenty years, therefore, before he came to the Local Government Board he had been busily engaged in sanitary administration and had acquired an unrivalled experience in preventive medicine. He brought with him to the Board in 1871 a brilliant group of nine devoted workers, each a specialist in some branch of public health. Among the best known were Seaton, Buchanan, Netten Radcliffe, Thorne, Ballard, Blaxall, and Dr. (afterwards Sir) Anthony Home, V.C. A little later William Henry Power joined them.

Simon himself was an F.R.S., and four others of his small band of medical inspectors subsequently received this blue riband of science. Three of them also ultimately succeeded, one after the other, to the office of medical officer to the Board, one receiving a knighthood and the other two the K.C.B. These facts show the high quality of the men who were the first members of the Board's Medical Department, and how deserving they were of confidence.

As far back as 1854 Simon had drawn up a scheme for the formation of a "Ministry of Health" in which investigation of industrial diseases and the supervision and regulation of unwholesome conditions of employment found a place along with other matters for improving the health of the nation. When the Local Government Board was established, the more thoughtful sanitary reformers of the time had misgivings as to the effects that might follow upon the conjunction of public health with the administration of the Poor Law. It was confidently expected, however, that separate secretaries would be appointed for each of the two branches of the work, that therefore the two interests would not clash, and that Mr. Simon would have the same liberty of action and powers of initiation in regard to the medical policy and work of the Board as he had when at the Privy Council. Unfortunately for public health the president concentrated the duties in the hands of one secretary, the previous Secretary of the Poor Law Board. By statute the new Board was empowered to delegate the exercise of its powers to its secretariat, and Mr. Simon was informed that his department was only to be used for consultation or for special inquiries, and that in all cases these inquiries would have first to be sanctioned by the secretary or by an assistant secretary. The effect of this was, practically, that Simon could take no action without the written permission of the secretariat. The groundwork of his plan for immediately improving the sanitary condition of the country was to make, by his medical staff, a survey of every district in England and Wales, and he asked for sanction to carry this out; also, in order to do the work without undue delay, he proposed the appointment of four or five additional medical inspectors. Most unfortunately for the country his proposals were rejected. All that he secured was permission to inspect, as occasion arose, certain districts in which a scandalous amount of disease was present, or where complaints had been made as to grave insanitary conditions. But the districts thus inspected formed but a fraction of the number that should have been visited, and the beneficial results were therefore comparatively small for the whole country. How great was the need at the time for this survey is shown by the following facts: There were no medical officers of health in office except in a few large cities such as London and Liverpool; what sanitary legislation existed was largely of the adoptive kind and seldom adopted; filth nuisances of the grossest sort were almost universal; the subsoil of many towns and villages was sodden with human excrement; midden privies stood in close proximity to shallow wells sunk in porous soil; sewerage and drainage were often defective or absent altogether; housing conditions were bad, and overcrowding was common; the so-called tenement houses of the poorer classes were "hotbeds of nuisance and disease"; the general death rate and the infantile mortality were excessive; statisticians of the day calculated that of about 500,000 deaths annually reported at least 125,000 were due to preventable causes. It may be added that in 1871 nearly 14,000 persons died of enteric fever and over 23,000 of small-pox; typhus and malignant scarlet fever were prevalent in many parts of England, and relapsing fever was appearing in London. At the same time cholera was epidemic on the Continent and had spread to ports in the Baltic, from which it had reached Hamburg, a place that often in the past had supplied the infection to England by means of shipping.

It is evident from all this that there was urgent need of a sanitary survey, but the Board's secretariat, obsessed apparently with the idea that the administration of the laws for the relief of the poor was the one thing needful, refused to listen to Simon or to allow his medical inspectors to rescue the nation from insanitation and filth diseases. This refusal was a bitter blow to Simon, with his great record of hitherto continuous progress. Unhappily another humiliation was awaiting him. In 1872 an Act had been passed making the appointment of medical officers of health and inspectors of nuisances compulsory in every sanitary district in England and Wales. In 1875 the Board decided to ascertain the sanitary state of the country and to advise local authorities as to these new appointments. It seems now incredible, but it is the fact that the Poor Law inspectors, now called "general" inspectors, were entrusted with this duty! These inspectors were gentlemen of good average education, well versed in the laws for the relief of the poor, but quite ignorant of public health or of sanitary administration. Simon had the humiliation of witnessing the harm these men were doing in dealing without expert advice with the formation of sanitary districts—mischief, it may be observed, from the results of which the sanitary service of the country is still suffering. The action of the Board can hardly be

explained by ignorance of the problems involved; it is more probable it was an aggravated instance of the antagonism which then prevailed among lay officials of the Board against the medical profession, an antagonism which is said still to linger in some Government departments. Other medical investigations which Simon wished to carry out were cut down or restricted, the Medical Department becoming more and more subordinate to the Poor Law work. Any medical inspector instructed to make an investigation was directed by the Board to write, before he began the work, to the Poor Law inspector of the district, intimating to him that it was proposed to make inquiry on such and such a date into epidemic disease or insanitary conditions, as the case might be. It was, we believe, very rare—at any rate in the earlier days—for any acknowledgement to be made of the medical inspector's letter, or for the Poor Law inspector to assist him in the investigation. There is no doubt the latter official resented what he regarded as the intrusion of a medical inspector into his district.

Another point which galled Simon was that correspondence with sanitary authorities, regarding matters arising, for instance, out of a medical inspection, had to be conducted by the clerks of the Board and the letters signed by a secretary. Letters drafted by the clerks of the Board often missed the point at issue, though the letters had passed through three or four hands. The obvious way to save time and labour would have been for the medical officer or his deputy to dictate in his own department the letter, which would then have been signed by him. Referring to this "circumlocution" method of the Board, Simon remarked in his *English Sanitary Institutions*: "Where medical officers of health were supposed to be advised on their official reports and on points of sanitary practice involved in them, not only does the signature of the secretary fail to add weight to the advice in the letter, but the advice may to some extent have had to adapt itself to the signature; for the common usages of professional life would hardly allow the central medical officer to express himself through a non-medical secretariat as freely as if he were writing in his own name. There would be difficulty in medical consultation correspondence on the treatment of disease if it were made similarly circuitous; if, for instance, a foremost London consultant, having to suggest to his professional brother in the country some different treatment for the squire's asthma or the lady's megrim, were not in direct correspondence with his fellow practitioner, but must have his medical suggestions adopted by the family solicitor and expressed to the distant doctor in the form of a lawyer's letter." Simon's position gradually became more and more untenable; and to him it was intolerably bitter to see great opportunities wasted or mismanaged by a hostile and sanitarily incompetent lay staff. He struggled on for five years, from 1871 to 1876, when he retired, a discouraged and disappointed man.

Considering the course of subsequent events it is impossible not to realize how much higher would be the present position of our national health, and how much higher also would be the status of the sanitary service of the country, if Simon's statesmanlike and practical proposals had received the attention they merited. It is a matter of notoriety that the brilliant work which he and his successors did at the Local Government Board was achieved in the face of official hostility and petty interferences; nevertheless many of the reports of the Medical Department under Simon are still regarded as classics in sanitary literature. Though somewhat late, Simon received ultimately some acknowledgement of his unselfish efforts on behalf of public health, for in 1887 he was decorated with the K.C.B. He died in 1904 at the age of 88. He was succeeded as Medical Officer of the Board by Dr. Seaton, whose name will always be honourably associated with the passing of various Vaccination Acts, and who will be remembered for his organization of public vaccination throughout this country. He, however, remained in office for only three years. His health was bad most of the time, and he died a month after his resignation in 1879. His successor was Dr. (afterwards Sir George) Buchanan, who continued the struggles of the Medical Department against the oppression of the Board's secretariat, striving for a proper recognition of the importance of the medical work, and for a freer hand in taking steps to improve the public health. He carried on, with varying success, until 1884, when cholera again became epidemic on the Continent and threatened to invade England. By this time public opinion as to the prevention of disease had so far developed as to hold the central health authority responsible for taking proper steps to protect the country. For this or some other reason, a proposal by Buchanan to start a sanitary survey of the country was favourably considered by the Board and finally sanctioned, permission being given to engage six temporary medical inspectors to assist the permanent staff. This survey led to most gratifying results. Many badly administered districts were placed in a proper condition, many scandalous nuisances suppressed, water supplies improved and protected, proper sewerage and drainage provided, and other conditions made wholesome and sanitary. The district councils as well as their officials were deeply grateful for the help and advice they had received from the medical inspectors during the survey. Even the unsympathetic officials of the Board could not deny the good work that had been done, and later agreed to a fresh sanitary survey and the appointment of additional medical inspectors in 1892, when cholera actually invaded England. In 1892 Buchanan, whose health was now unsatisfactory, resigned, but his death did not occur until 1894. Upon Buchanan, as well as upon Simon, fell the heaviest part of the great struggle against the injustice inflicted on the Board's Medical Department.

Sir Richard Thorne succeeded Buchanan in 1892, and under him the Medical Department came in time gradually to receive better treatment from the lay officials of the Board, and in consequence much excellent work was then accomplished. The improvement of the relations of the Medical Department with the Board after 1892 was due to a great extent, to the firm attitude assumed by Sir Richard Thorne, and to the exercise of his diplomatic abilities and tact, which helped to smooth over some of the difficulties that had previously existed. We have not space to discuss further events in the life of the Medical Department under the leadership of Thorne and his successor, Sir William Power, and later under Sir Arthur Newsholme. The attitude of the secretariat towards the Medical Department in the Board's latter period was greatly improved and their relations were more or less cordial; but it may be said that the seeds of evil planted in the early days of the Board left their inhibitory influence on the national health to the very end of that authority's existence.

THE annual congress of the Ophthalmological Society of the United Kingdom will be opened at the Royal Society of Medicine on the morning of Thursday, April 29th, when the president, Mr. J. B. Story, president of the Royal College of Surgeons of Ireland, will deliver an address. In the afternoon there will be a clinical meeting at Moorfields Hospital, and books, museum specimens, drawings, and portraits belonging to the hospital will be exhibited. On the morning of April 30th a discussion on diabetes in relation to diseases of the eye will be opened by Sir Archibald Garrod, Mr. R. Foster Moore, and Dr. E. Spriggs. Papers will be read in the afternoon. On the morning of Saturday, May 1st, a visit will be paid to the special hospital of the Metropolitan Asylums Board for cases of ophthalmia neonatorum, and a discussion on the prevention and treatment of that disease will be opened by Dr. Gibbon FitzGibbon, Master of the Rotunda Hospital, Dublin, and Mr. M. S. Mayou. The openers of discussions and the readers of papers are allowed twenty minutes, and subsequent speakers ten minutes. Further particulars can be obtained from Mr. F. A. Juler, 24, Cavendish Square, London, W.1. Notice is given that all communications must be typewritten.

Scotland.

WESTERN INFIRMARY, GLASGOW.

CHRISTMAS was celebrated at the Western Infirmary, Glasgow, by an informal meeting of its supporters. Lord Glenarthur, Chairman of the Board of Management, spoke of the great responsibility that fell on the medical superintendent, Colonel D. J. Mackintosh, C.B., and the matron, Miss Gregory Smith, in carrying on the work during the war, and heartily welcomed back those members of the staff who had been on naval and military service. The Scottish Branch of the Red Cross Society, he said, had made a grant of £10,000 to provide and equip a building for massage, medical electricity, and remedial exercises, and friends had given the university £5,000 to establish a lectureship in electrical diagnosis and therapeutics in connexion with the infirmary. It had been possible to give the nurses on day duty a fifty-six-hour week, but to make further progress the public must provide funds for an addition to the Nurses' Home. The Countess of Glasgow then presented the prizes to nurses successful at the half-yearly examinations. In moving a vote of thanks, Sir Hector Cameron expressed the hope that the whole body of the medical profession and of the nursing profession would resolutely set their faces against any perpetuation of amateur nurses, an opinion which was received with applause. Congratulating the nurses on the fact that they were within sight of a statutory register, he warned them that it would not guard and protect them like a trade union; it would protect the public just as the Medical Acts protected the public, by enabling them to distinguish between qualified and unqualified practitioners.

England and Wales.

COUNTY HEALTH ADMINSTRATION.

A REVIEW of health administration in Cheshire with reference to the Ministry of Health Act, 1919, communicated to the Cheshire Insurance Committee by its clerk, Mr. F. T. West, has been published in a pamphlet. It is stated that in the county of Cheshire there are now nearly 300 separate organizations, including public, voluntary and charitable bodies, and others carried on by private enterprise, all interested in health administration, but working for the most part without co-ordination. It is admitted that the desired co-ordination must be built up little by little, but it is suggested that the first step should be the establishment for each area, whether it be county or county borough, of a central health authority on which every interest shall be represented and which shall be directly responsible to the Ministry, with subordinate health authorities for subareas where required. On this authority ratepayers, insured and non-insured, the medical profession and pharmacists should have direct representatives. Among other matters with which this authority should deal are specially mentioned housing and town planning, food inspection, instruction in cookery, extended supervision of shops, warehouses, and offices, as well as of factories, infant mortality, medical examination and feeding of school children, sick nursing, education in personal hygiene, additional institutional provision for tuberculosis including after-care, training and convalescent colonies, and physical and recreational training. It is suggested that the whole financial burden of health administration should be directly borne by the Exchequer, and that the constitution proposed for the health authority would render it capable of preventing wasteful expenditure. This suggestion runs counter to general experience in this country, and may be expected to excite opposition. A detailed list of the various health organizations operating in Cheshire is given, and an elaborate chart of a proposed scheme of organization and co-ordination, starting from the Ministry of Health as the supreme authority, and allocating the relative positions which should be taken by each of the present organizations.

CENTRAL MIDWIVES BOARD.

A meeting of the Board was held on December 18th, with Sir Francis Champneys in the chair. Out of the four fresh cases heard three midwives were removed from the roll and the resignation of the other was accepted.

It was decided to comply with the request of the Ministry of Health to attend a conference on the question of approval as teaching centres of maternity homes established under the schemes of the Ministry of Health; the Chairman, Lady Mabelle Egerton, Dr. Fairbairn, Miss Paget, and Mr. Sangster to be the Board's representatives.

Dr. Fairbairn having drawn the attention of the Board to a case of difficulty on the part of a midwife in obtaining medical assistance at the fees allowed by the London County Council, it was decided that copies of the letter be forwarded to the London County Council and the British Medical Association.

Correspondence.

FORERUNNERS OF HARVEY IN ANTIQUITY.

SIR,—In his learned Harveian Oration Dr. Raymond Crawfurd makes no allusion to the contribution of the ancient Egyptians to medical knowledge. Of course, a great deal of nonsense is written from time to time concerning these people and their mythical medical proficiency; indeed, it has been gravely asserted recently by an acknowledged authority that we are but "poor imitators" of them, and that in Egypt, 3000 B.C., doctors had very much the same knowledge as we have, and "that one is really obliged to ask oneself whether the world has progressed since the days of Sesostris to those of Pasteur, or if humanity goes back a pace in one direction, when she advances in another."

However, as regards their anatomical knowledge, especially as concerns the circulation, I think they "suspected" a great deal, which probably at a much later period has been assigned to others. Anatomy was chiefly studied on animals, and human dissections were only allowed for a short period, about 300 B.C. in Alexandria. Anatomy occupies a small space in the pages of the Ebers papyrus and is confined to two very small and very ancient treatises, which are painfully obscure. One has the pretension to impart full knowledge of the heart, including its functions, and it is interesting to notice that the same word—moret — designated both arteries and veins. According to this ancient anatomist, there is, in the heart, the vessels that supply all the members. The physician, the magician, or the enchanter, who puts the fingers on the head, on the nape of the neck, on the hands, on the region of the heart, on the arms and legs, everywhere the motion of the heart touches him, coming through the vessels which permeates all the members. The pulse is evidently alluded to, and it appears to me that the action of the heart as a pump is here recognized. There are, it is stated, four vessels in the nostrils, of which two give the mucus and two give the blood. There are four in the interior of the temples which furnish the blood to the eyes and afterwards supply all the humours which lubricate the eyes. There are four vessels to the two ears, two to the right side and two to the left. There are six vessels to the legs, three to the right and three to the left, which reaches to the sole of the feet. There are two vessels to the testicles, which supply the sperm, two for the thighs, and four for the liver, which supply the water and spirit producing all the humours that purify the blood, and two the kidneys, producing the urine. When the heart is diseased its work is imperfectly performed, the vessels coming from it are inactive, so that they cannot be felt; they are full of air and water. When the heart is dilated the vessels proceeding from it contain effete matter. If a suppurative disease occurs in the body abscesses are formed in various parts, the heart causing (evidently the septic matter) to traverse the blood vessels, producing fever and inflammation of various kinds in the body. The heart is in a morbid state while the fever lasts. It is quite evident that the facts underlying the circulation were known, and that the action of the heart as a pump was recognized.

Incidentally, in the small treatise alluded to thoracic aneurysm (then very common, doubtless from the nature of the employment of the majority of the inhabitants) is accurately described.

If the aorta is made to project, to protrude, all the members degenerate, or become affected on account of the strain put on

the heart. If aneurysm is produced in the heart there is a sac at the confines of the stomach and liver. The orifices of the heart and its vessels are protruded, and after they become inflamed the sac bursts.

Some of the anatomical information quoted can be referred to a period about 6,000 years ago, while the greater part was written about 1600 B.C. During the intervening period it must be admitted that but little progress was made in anatomical knowledge.—I am, etc.,

T. GERALD GARRY, M.D.,
Consulting British Physician, Pistany (Pöstyén),
Cairo, Dec. 7th, 1919. Czecho-Slovak (in summer).

LOCAL CLINICAL LABORATORIES.

SIR,—I believe I shared the honour (together with Dr. Hugh Miller) of beginning the discussion on local clinical laboratories, so perhaps I may be allowed of your hospitality to reply.

All the evidence hitherto adduced has been in favour of many local laboratories and few central ones. The commercial laboratory has been shown to be undesirable for many reasons, the greatest of which is the absence of the pathologist at the bedside. "Clinical Pathologist" is a whole-hogger for the central laboratory, partly because there are only eight reliable histologists extant. I cannot resist a sly dig: Does he include himself? "Clinician" would have the pathologist out of the way as a competitor in practice. A pathologist might as fairly deprecate the handiwork of those general practitioners who do a little private pathology of their own. Abduction of patients, deplorable though it be, is not a peculiar attribute of the pathologist. I agree that if a patient is sent for an autogenous vaccine the doctor who sends him or her has the right to give the vaccine, but I am not by any means sure that this is always sound from the scientific point of view. Strictly speaking, the person with the greatest experience of vaccine therapy should administer vaccines.

It may be of interest to state that here in Eastbourne we have recently established a local clinical laboratory by our own initiative. The laboratory itself, with certain apparatus (about one-third), was provided by the generous foresight of the hospital authorities at my suggestion, backed by the Medical Committee. The rest of the apparatus, all materials and maintenance, are found by the pathologist who does therein both hospital and private work. Cleaning is done by a hospital servant, and the pathologist provides his assistant (one is at present sufficient). This scheme works well, and is fairer perhaps than when private work is allowed, assistants, salary, materials and maintenance are provided, as in some London hospitals. I think the Ministry of Health might easily adopt some even standard between these two extremes. If this were done, the problem of the local laboratory would be solved, for it need cost but little; it could be made self-supporting, and sound pathology could be made to cost less to the private patient.—I am, etc.,

Eastbourne, Dec. 29th, 1919. A. G. SHERA.

"NEW LAMPS FOR OLD" IN OBSTETRICS.

SIR,—Dr. Shirlaw is under an entire misapprehension as to the objects and results of the system I am advocating. It is not a question whether the patient will not do well if she is left to nature. She may do so, but she will suffer a great deal of wholly unnecessary pain—pain, well described in the Old Testament as the "pains of hell,"—this suffering will be prolonged for hours, and she will often be left in a state of exhaustion and generally with a ruptured perineum.

All these evils are entirely obviated by the skilful use of forceps and chloroform. Since I have used Wagstaffe's instrument, I have *never* had a laceration of any kind; the time consumed, by the passage of the head, has been about five minutes, and the patient makes a rapid recovery.

In a consecutive series of a thousand labours there have been three cases of septicaemia.

The first had been left entirely to nature—not even an examination being made. She recovered.

The second had no lacerations of any kind. I was informed by a distinguished gynaecologist that she would certainly die. She made a complete recovery, and I subsequently found that she had attempted to procure abortion with a piece of wood.

The third case died, apparently of pulmonary embolism, on the fourth day of the fever. She had undergone a difficult craniotomy.

This gives a case incidence of 0.3 and a death rate of 0.1 per cent. There are hundreds of men in England who employ the same methods as I do whose experience is very much greater than mine and whose results are just as good.

To stigmatize such procedure as "a reign of force," or to draw comparisons with it and craniotomy or Caesarean section is, to say the least of it, ridiculous. Nor is it reasonable for anyone to condemn a system of which he has had no practical experience.

After all, this discussion is of little more than academic interest, for the future practice of midwifery depends neither on the theories of gynaecologists nor on the methods of general practitioners, but on the attitude of the general public. It is the expectant mother and her friends who will decide for us what line of treatment shall be adopted. The modern young woman is an enigma, but she knows her own mind on many things, and when she has to choose between being left to nature—already outraged by many thousand years of civilization—and the safe and speedy relief offered her by a skilful obstetrician, there can be little doubt what her decision will be.—I am, etc.,

London, E., Dec. 27th, 1919. A. CAMPBELL STARK.

SIR,—I have read with interest Dr. Mears's reply to my letter in your issue of December 27th, 1919. While completely agreeing with him that the teaching of hospital obstetric physicians is not always sound, I see nothing in his arguments to make me alter my contention that *watchful* expectancy is sound midwifery and early interference on the slightest provocation is not—a contention in which, though only a general practitioner, I feel confident that I will be upheld by the majority of consultant obstetricians.

If we accept, as he evidently does, the modern view that labour is a pathological process, at least amongst civilized women, we must also accept the fact that any internal interference with its course is in the nature of a surgical operation. Given, for instance, a case of acute appendicitis, the surgeon will only operate in the patient's home when it is impossible to do otherwise. How much the more would he hesitate to remove an appendix under home conditions at the first sign of trouble in that region, or merely to prevent the development of such trouble! Yet an uncomplicated appendicectomy is no more difficult than forceps delivery or placental removal.

My reply to Dr. Mears's remark regarding the application of forceps twenty four hours after the child should have been born is contained in Barnes's adage: "We should *wait* to see what a woman can accomplish, not what she can endure." The italics are mine.

Dr. Mears first of all advocates prophylactic surgery, and then, to render his position tenable, would see us all specialists before being allowed to handle our instruments: which is a condition of things only to be hoped for at the millennium.—I am, etc.,

Blackheath, S.E., Dec. 27th, 1919. WILLIAM CORBET.

SIR,—I notice that the chief argument brought by some of your correspondents against the frequent use of forceps in labour is the increased risk to the patient from (1) laceration of cervix, vagina, and perineum; (2) haemorrhage; (3) sepsis.

(1) I think every one agrees that forceps should not be applied until the cervix is completely dilated. With reasonable skill and care, therefore, laceration of the cervix should never be caused by forceps. My own experience is that tears of the vagina and perineum are more easily avoided when the head is completely under the operator's control, as it is when grasped by the forceps.

(2) Forceps should, of course, never be applied during secondary uterine inertia. If this rule be adhered to, I see no reason why haemorrhage should be more common with forceps than without. On the contrary, *post-partum* haemorrhage is more likely to occur in a case where the uterus is over-tired after a prolonged labour without assistance.

(3) With regard to sepsis; it should surely be possible nowadays to make reasonably certain of avoiding serious infection by hands or instruments.

Another argument we hear is that there is great risk of injury to the child's head when forceps are used. With reasonable care and skill there should be no risk of serious injury except in those very bad cases in which every one would agree that delivery could not take place without assistance. Personally I have used forceps in four or five hundred cases (40 to 50 per cent.), and do not remember among them any case of serious post-partum haemorrhage, sepsis, or injury to the child (beyond a few bruises and abrasions in some cases).

I apply forceps in every case when the second stage is unduly prolonged if the head is presenting. Of course, occipito-posterior presentations should be allowed a longer time than occipito-anterior, so that reduction may, if possible, take place. To my mind, everything depends upon the skill of the operator. With reasonable skill the use of forceps should not increase the risk either to mother or child—quite the contrary. Skill can only come from frequent practice. The man who only uses forceps in extreme cases—say, two or three times a year—cannot acquire the skill and self-confidence which are necessary in a difficult forceps case. Dr. Mears mentions Dr. Park, who attended 3,900 confinements and only used forceps twice. He speaks of the avoidable agony which must have been endured by at least half of these cases. I agree with him; but my sympathy goes out even more to the two unfortunate women (probably very difficult cases) who were delivered with forceps by a man with that amount of practice in their use.—I am, etc.,

Leicester, Dec. 28th, 1919. JOHN A. BARNES.

SIR,—The old controversy regarding the question of interference or non-interference in confinements which run a normal course—in other words, natural parturition—has again exhibited all the virulence of the past. I believe the last war of words upon this theme raged for several months in 1906, and since then I have heard or read nothing more confusing or enlightening.

The truth is, I believe, that it is quite impossible to lay down arbitrary rules that will suit all circumstances. Everyone attending an obstetric case should have a thorough knowledge of the technique underlying all operations and manipulations in the delivery of a woman, otherwise there is sure to be a certain percentage of bad results. And it is my opinion that the average medical practitioner who has been in practice for some years has acquired almost perforce skill and dexterity in the management of most obstetric cases. The maxims taught in the schools and laid down in textbooks are chiefly of value in guiding the tiro; after that much depends upon the experience, observation, and resolution of the practitioner. One of the oldest obstetric aphorisms is the soundest: "Meddlesome midwifery is bad midwifery." One correspondent advises us not to "stay with the patient until the cervix is dilated," even should "the baby be born before your next visit." That writer evidently has never practised in a wide country district like mine.

The percentage of operative interference of all kinds depends upon many factors. Possibly in dense industrial districts, with overworked women of poor physique, a conscientious practitioner may be compelled to use forceps and anaesthetics more frequently than I in a country district, where the women lead a healthy outdoor life and show few pelvic or other abnormalities. In towns the proportion of highly nervous women is much higher than here. These neurotic creatures frequently have their alarms increased by poring overy trashy literature of the "silent sleep" purveyor, who is out to harrow their feelings with vivid descriptions of tortures suffered by women at the hands of callous doctors of the old school. Scopolamine-morphine treatment has a certain value in such cases, and is a great boon to the practitioner, its chief disadvantage being the close and constant attendance it demands. I have used it in nearly fifty cases, and I consider it more suitable for institutional treatment than in general practice.

I may be utterly wrong, but I think many town practitioners, and possibly some country ones, resort to the use of forceps upon very slight provocation, chiefly for reasons of comfort or convenience. With a skilful manipulator no harm may be done; but it is not good practice to undertake a needless operation, no matter how skilfully performed. If a case is progressing steadily and favourably, even if slowly, and the patient's strength is well maintained, I consider it is taking an unjustifiable, if somewhat remote, risk to expedite or, worse still, hurry delivery; it is almost always bad treatment to attempt it before the end of the first stage of labour. With a little tact, or perhaps an assumed sternness, one can work wonders with most women. Fortunately most cases are quite normal, and patience, next to absolute cleanliness, is of the greatest importance.

I suppose all of us, early in our obstetric practice, employ forceps oftener than we do later after a more extended experience. The temptation comes most forcibly when we have acquired some skill in their use. Greater certainty in diagnosing the presenting part leads, in my opinion, to a less frequent resort to hastening delivery. The practice of examining women during pregnancy is an excellent safeguard, and it obviates many obstetrical catastrophes. A great deal of unnecessary traction is the result of ignorance; an occipito-posterior presentation detected early loses half its terrors, and, indeed, becomes as easy, in many cases, as a L.O.A. Let it get impacted in the cavity and the case is then of quite another complexion!

Much of the bad teaching of the schools has been responsible for bad midwifery. We can all remember the douching mania, not to mention the giving of ergot before the birth of the child, and the silly practice of completing the third stage in a panic of squeezing and kneading, with the inevitable danger of post-partum haemorrhage due to pieces of retained placenta. Even writers of textbooks taken different views. Whitridge Williams instructs us to search always for the posterior ear when applying the left blade of the forceps; Webster, another American writer, stigmatizes such teaching as being "unscientific and ridiculous," and states that the blades lie safely only in one position—namely, right and left as regards the pelvis.

The only percentages we should be anxious to maintain are the percentages of good results, with healthy mothers and vigorous babies. That sounds like a platitude; but it is not always kept steadily in view. Midwifery being to many of us the sole department of our profession where we are called upon to do "major" work, we should take every means in our power to excel in it. A rise in temperature should cause us seriously to overhaul our methods and review our technique, and a dead fully developed baby should be accounted a disaster.—I am, etc.,

Helmsley, Yorks, Jan. 4th. ALEXANDER BLAIR, M.D.

MODE OF QUININE ADMINISTRATION.

SIR,—In his letter in your issue of December 27th Sir Ronald Ross expresses a doubt "whether the therapeutic value of quinine always increases *pari passu* with the dosage," and in support of this view he states that in a series of cases 2 grains four times a day caused the parasites to disappear as quickly as 30 grains a day.

But is there not a fallacy working in the background of such reasoning? The amount of quinine which will cause the disappearance of parasites from the peripheral circulation is not an index-coefficient of cure, for a similar and as complete a disappearance will sometimes take place after an attack of untreated malaria. This fact serves to remind us that in administering quinine we are not curing the disease but only helping Nature to do so. The personal factor in each individual case is an "unknown x," and it is vain to imagine that we can lay down any hard and fast rules as to dosage. Many people have died as a result of having had too little quinine, but for myself I have never seen one who suffered from having had too much. Since whatever we do we may err, let it always be in the safe, and therefore right, direction.

In my humble opinion, experiments on dosage conducted in England have little practical value, for those who make them are necessarily dealing with the disease at a stage when it is too late to think of cure. He who would cure malaria must act quickly and drastically, for when once the relapsing stage has supervened Nature, with her handmaiden Time, alone can, and will, bring about the desired end. True we can still assist her with quinine, but the amount we give no longer affects the ultimate issue as it may in the first attacks. In this respect the analogy between malaria and syphilis is both interesting and instructive.—I am, etc.,

Farnham, Dec. 26th, 1919. R. U. MOFFAT, M.D.

SIR,—I hesitate to add to a lengthy correspondence, but there is a point which has not been mentioned by your correspondents. In many cases of malaria, whether benign tertian, malignant tertian, or quartan, quinine given by the mouth fails to affect the temperature. In a few cases, even when intercurrent disease can be excluded, intramuscular or intravenous injections of quinine have little effect upon the temperature. In the latter cases the drug should be administered both orally and by injection.

Colonel W. H. Willcox (BRITISH MEDICAL JOURNAL, December 13th, 1919, p. 796) states that in certain cases "courses of treatment should commence with from three to six intravenous or intramuscular injections of quinine, and treatment carried on afterwards by oral administration." My point is that in these cases quinine should be given by the mouth during the courses of injections as well as afterwards. The result is even more striking.

Quinine in malaria furnishes by no means the only example of the beneficial result of the administration of a drug by a dual method.—I am, etc.,

S. G. ASKEY, M.A., M.D.,
Late temporary Captain R.A.M.C.

Maidstone, Jan. 3rd.

CONTRACTION AND RETRACTION RINGS.

SIR,—The question of the contraction and retraction rings is one to be decided by experience, and it is perhaps fortunate that experience has not been sufficient to establish their precise relations.

The evidence we have tends, in my opinion, to show that the uterine muscle is apt to contract—in obstructive cases to retract—wherever there is a sulcus or room for a thicken d piece of musculature to find a locus.

My object in writing, stimulated by Dr. Lochrane's article in the BRITISH MEDICAL JOURNAL of January 3rd, is to maintain that in labour one may meet with a contraction ring where there is no evidence of obstruction or exhaustion. I came to this conclusion in a case where a patient (multipara) gave birth to a fetus in the seventh month. There was no obstruction in the pelvis, there was a breech presentation, and in due course the membranes were ruptured. I expected delivery to follow rapidly, but it did not, and traction on the legs failed to cause any progress. Exploration of the uterus revealed a contraction ring round the neck, and under chloroform anaesthesia dilatation was sufficient to enable the head to be scooped out of the uterus, and so the labour was easily terminated. A contraction ring of this sort is obviously differentiated from a retraction ring, inasmuch as there was no obstruction, and, being a breech case, it was situated quite high up in the uterine cavity.—I am, etc.,

O. ECCLES.

London, W., Jan. 6th.

PREVENTION OF VENEREAL DISEASE.

SIR,—Our attention has been called to a letter in your number of December 27th, 1919, from Mr. E. B. Turner and Dr. Otto May, making some comments on a pamphlet issued by this society. These gentlemen are at perfect liberty to place any construction on this pamphlet they think proper. The names of those who are associated with our society furnish sufficient contradiction to the imputation that we are animated by a desire to promote promiscuous sexual intercourse.

Our policy was clearly expressed in an address given by our treasurer, Sir William Arbuthnot Lane, at a meeting held at the Central Hall, Westminster, on December 16th, copies of which can be obtained on application to the honorary secretary.

For the information of your readers we enclose a general statement of our aims and objects, which we should be obliged if you would publish.—We are, etc.,

WILLOUGHBY DE BROKE,
President.
H. WANSEY BAYLY,
Honorary Secretary.

143, Harley Street, W. 1, Jan. 7th.

*** The document enclosed states the aims and objects of the society as follows:

It is obvious that the best way of avoiding venereal disease is to abstain from promiscuous sexual intercourse. It is, however, certain that a large number of persons continue, in spite of moral teaching, to expose themselves to risk, and so to incur and spread disease among the community, the chief sufferers being women and children. Venereal disease is accountable for a large proportion of cases of insanity, nervous diseases, loss of sight, and sterility. These diseases have become a menace to national health and prosperity, and infection can be prevented by means of self-disinfection, if properly applied, immediately after exposure to risk. It is therefore necessary:

I. To instruct the public as to (*a*) the vital importance of self-disinfection at the time of exposure to risk as a preventive of venereal disease; and (*b*) the methods of application.
II. To advocate such further steps for the prevention and ultimate eradication of venereal disease as may be deemed advisable.

SIR,—I was surprised to read the objections of "Surgeon Commander R.N." to the letter of Drs. Mary D. Sturge and Rose Lynch Molloy, which was a valuable reminder that the prophylactic scheme has its limitations, especially with women. It is indeed a serious error to state that "such diseases are very easily prevented." The world was not made for man alone, but also for woman, and the latter will be very seriously misled if she accepts the statement at its face value.

Moreover "Surgeon Commander R.N." will not find all his colleagues of his opinion. As a temporary surgeon lieutenant during the war I made it my business to collect opinions on the results of prophylactic treatment in the navy from as many "permanent" senior medical officers as possible. Their opinions varied, and none were as dogmatic as his. Most of them "thought it did a good deal of good," but would go no further than that. One stated that he could vouch for an instance where he knew definitely that prophylactic nargol and mercury ointment had been thoroughly applied at the time, and nevertheless failed.

What is "Surgeon Commander's" method of ascertaining if prophylaxis has been properly carried out? In many cases how can he know? Any one inclined to be dogmatic can easily say that because the prophylaxis has failed it cannot have been carried out properly. The psychology of the patient enters largely into the character of the reply he will give when asked whether he used prophylactic measures. He may falsely answer "Yes" merely to put himself in the right, especially if he knows that the medical officer holds strong opinions on the subject. Again, he may falsely answer "No," fearing to prejudice the diagnosis.

Lastly, "Surgeon Commander" apparently attributes any failure of the men to adopt effective prophylaxis to the medical officers "largely drawn from civil life." I and many other temporary medical officers have explained the benefits and methods of prophylaxis to the men many times, and supervised the supply of the necessary disinfectants, but have been handicapped in some instances by the lukewarm support or even apathy shown by some of our senior medical officers. The last surgeon commander under whom I worked was in charge of a big naval shore station, but he did not have one address given to the men, nor see that the necessary arrangements were made for them to obtain disinfectants.—I am, etc.,

HEAR BOTH SIDES.

December 22nd, 1919.

SIR,—In your issue of December 20th, 1919, there is a letter under this heading signed by "Surgeon Commander R.N." Much as we appreciate the motives of the writer in promulgating his experiences for the public good, we, on the contrary, greatly deprecate his insolent attitude towards temporary medical officers to whose negligence and stupidity he attributes many of the failures in venereal prophylaxis in the services. These medical officers are alleged to "damn what he and others consider the incalculable and almost certain benefit of prophylaxis." Truly a most remarkable observation!

We would humbly suggest that these sweeping remarks are scarcely accurate when including the large body of men who turned out to supplement the medical services; we protest against the low morale assigned to temporary officers by this critic.

Many of us were experienced in the science of venereal prophylaxis, many were actually "eminent," the remainder were surely sufficiently well versed in modern hygienic science to appreciate and to advise against this venereal scourge. We would be loath to think that we were the demoralized faddists that this correspondent suggests. As "Surgeon Commander" now informs us, the correct way to preach venereal prophylaxis is "by stealth." I fear that the measure of "stealth" employed by a large

proportion of permanent officers of the rank of "Surgeon Commander R.N." is too insignificant to be appreciated. Should they first attempt to put their own house in order probably they might allot some of their failures to their own permanent officers, who maybe are "too tired" to preach the doctrines of preventive medicine, or who may conveniently call to their aid the other formulated excuses with which "Surgeon Commander R.N." seems familiar.

As late temporary medical officers we have preached and practised prophylactic medicine to much advantage before joining the services and in the services, and so have a great many more of us who were "drawn from civil life." We maintain that the percentage is small of those temporary officers to whom it is imputed that they damn the progress of venereal prophylaxis by holding such views as "the punishment fits the crime" or "who have little faith from lack of experience, or conscientious objections to lecturing on the subject," or are even "too tired."

It was imprudent on the part of "Surgeon Commander" to assume so much, and improper of him to cast such aspersions upon a worthy section of an honourable profession.—I am, etc.,

December 31st, 1919. "LATE TEMPORARY SURGEON."

SIR,—Dr. Herbert Butcher (January 3rd, p. 28) makes the following statement: "I fail to see that as medical men we have any concern with the moral aspect of the matter. That had much better be left to others."

This is a comfortable but entirely false doctrine, look at it from what point of view we will, whether moral or medical. It is as though one said of the treatment of tuberculosis: "We as medical men have no concern with the causes of the disease—bad housing, overcrowding, insufficient and unsuitable food, etc.; the treatment of the causes had much better be left to others; our business is to treat the disease as it arises."

In the matter of venereal disease we are faced with a symptom of a moral disorder, and we shall be guilty of malpractice if we are content merely to attack the symptom and do not "treat the cause." It would seem that the only effectual method of treating the cause lies in giving our children a better sex education than we ourselves received. Now, it is a firm belief among those who lay stress on the moral side of this question that the distribution of literature on prophylaxis and the issuing of "preventive packets" is going to neutralize that better education we so urgently desire for our children.

If there is any truth in this belief, is it not our duty to give to the views propounded by the "moralists" our most careful attention?—I am, etc.,

WILFRED A. RUSSELL.

Surrey County Asylum, Brookwood, Jan. 5th.

*** We have received a number of letters from readers in various parts of the country, repeating in different words the argument, already put forward by other correspondents, that the moral aspect of this question is one that closely concerns the medical profession.

CHRONIC PANCREATITIS.

SIR,—The letters on chronic pancreatitis concern my daily work, and I should like to ask for myself and others that the discussion should be brought within the reach of the general practitioner, who certainly would rarely make a section of the pancreas for microscopical inspection even if he suspected pancreatic disease. We come, then, to the urine, and most of those who examine urine regularly have noticed, when using the copper test, the greenish-yellow reaction, which thirty years ago was regarded as of sinister prognosis.

Those who have examined urine carefully and found no sugar have yet been obliged to conclude 4 per cent. sugar shortly afterwards. This occurred to a patient quite recently. Feeling ill, and suffering from epiphora, the tears coming to her lips she found were sweet instead of salt. Such facts as have been brought forward by your correspondents force upon us the necessity of recognizing the dextrinous precession of diabetes. How far, then, is dextrine in the urine of the same importance as microscopical examination of the pancreas? Again, what is the exact character and differentiation of the dextrine? for the dextrines I have examined are sensitive to the iodine test—say 1 gram to 4 litres. Neither Professor Cushny's *The Secretion of Urine* nor the recent edition of *Practical Physiological Chemistry* of Professor Cole give us data. In the test which I have called the "carbohydrate test"—saturated permanganate solution 4 c.cm., dilute sulphuric acid 1 c.cm., and 1 c.cm. urine; elevation of temperature during ten minutes or more—would, I showed in the BRITISH MEDICAL JOURNAL some years ago, estimate lactic acid. I find that the oxidizables are in ratio to the specific gravity, the same as other constituents. So, taking 100 samples of non-diabetic urine, multiplying the temperature from 1° to 2.2° F. by 100, and dividing by the two last terminals of the specific gravity, we obtain a number of, say, 8. Although I suspect that dextrine, like alcohol, glucose, mannite, lactose, would alter that number, I am unable to say in the absence of experiment. If we could get dextrine amongst the suspects of the carbohydrates, or oxidizables, it would be a gain secured by this simple test. The carbohydrates offer wide divergencies as regards time of action, and dextrine, like the others, might be marked by its gravamen. Certainly the importance of the dextrine period of diabetes is urgent. Does the absence of dextrine precede the advent of sugar? Does the urine which normally converts or destroys small quantities of cane sugar, when recently passed, proved by my carbohydrate test, indicate similar conditions as the dextrine when this power is increased? Who can tell us?—I am, etc.,

London, S.E., Dec. 14th, 1919. J. BARKER SMITH.

FRACTURE DISLOCATIONS OF THE ANKLE.

SIR,—If Sir Arbuthnot Lane's views on the best methods of treating these fractures needed any further support, it could be obtained by a consideration of the difficulties met with by Mr. Rowlands[1] in using any other method. The case upon which Mr. Rowlands operated (Fig. 2) was an "abduction" fracture, and the easy way to get a perfect result would have been to expose the internal malleolus, the bone displaced *towards* the centre of the foot, disengage it from its position under the lower end of the tibia, adduct the foot and bring the fragment into correct apposition with the surface of the tibia from which it had been torn, and finally fix it there with a small plate.

But Mr. Rowlands operated on the fibula, on the bone displaced *away from* the centre of the foot, and in spite of dividing the tendo Achillis and peroneus brevis, seems to have met with very considerable difficulty before he was able, by introducing a long screw, to reduce the deformity and fix the bones in perfect position. The cause of his difficulty is at once seen on examining the radiogram (Fig. 2). What is keeping the external malleolus and astragalus from slipping back into position is not the tendo Achillis or the peroneus brevis, or anything inherent in the first named bone, but the presence of the fractured internal malleolus jammed beneath the tibia, and occupying the space which should be filled by the astragalus. In the easy operation of Lane this fragment is got out of the way at once and back the astragalus slips, bearing with it the attached portion of fibula. Indeed, Mr. Rowlands was lucky to get the parts back without any further injury, for if the misplaced internal malleolus had proved obstinate, it is probable that the onward thrust of his screw, penetrating deeper and deeper into the tibia and failing to draw after it the fibula fragment, would have snapped the latter in two. Fortunately, this did not occur, and he obtained an excellent cure.

To some of us the attempt to fix the lower ends of the tibia and fibula together by a rigid screw and subsequent bony ankylosis may appear a questionable proceeding, but Mr. Rowlands is able to tell us of a case perfectly well after seven years, so probably everything is quite all right.

Perhaps a word may be permitted on the nomenclature. Mr. Rowlands quotes Pott, but fails to quote Dupuytren. An inquiry at the library of the Royal Society of Medicine revealed that there were three copies of Dupuytren's works, but all uncut! On turning to his lecture on Fracture of the Fibula,[2] we find a perfectly clear definition of the rare fracture which is called by his name. "It involves not only fracture of the fibula, but also laceration of the strong tibio-peroneal ligaments, which generally

[1] BRITISH MEDICAL JOURNAL, December 6th, 1919, pp 735-737.
[2] *Injuries and Diseases of Bones.* By Baron Dupuytren. Translated and edited by F. Le Gros Clark. London: Sydenham Society. 1847. Part I, p. 282.

resist a force to which the osseous tissue yields." This is followed by an account of the only case he had met with "in nearly 200 cases of fractured fibula," entitled "Fracture of the fibula and rupture of ligaments, with dislocation of the foot outwards and upwards."

It follows from this that Mr. Rowlands's definition of Dupuytren's fracture as one in which "there are the lesions already described under Pott's fracture, and in addition either the inferior tibio-fibular ligaments are torn or there is a vertical fracture in the tibia just mesial to the tibio-fibular articulation," is not the true one.

After all, what matters in treatment is to make a clear division of all fracture-dislocations of the ankle into two, depending on their manner of production — namely, "abduction" fractures and "adduction" fractures. In the former, if an operation is required, the tibia is the bone to operate on, and in the latter the fibula; then, in recent cases, it will be rare indeed to meet with any difficulty. The later cases form a special class, and Mr. Rowlands is to be sincerely congratulated on the splendid result he obtained by transverse osteotomy in the case shown in Figs. 8, 9, and 10.—I am, etc.,

London, W., Dec. 11th, 1919. PAUL BERNARD ROTH.

APPARENT SPONTANEOUS RUPTURE OF A NORMAL SPLEEN.

SIR,—In Major Shorten's interes ing account of rupture of a normal spleen (BRITISH MEDICAL JOURNAL, December 27th, 1919, p. 844), two points call for comment:

1. Is spontaneous rupture (that is, without the application of force external to the organ) of the spleen possible, except as the result of effusion of blood or other fluid into the spleen itself? I should say "No." Some force is required, and there is none available. It is true that the fall was a slight one to rupture a normal spleen, but the organ may have been displaced by the previous accident, and so rendered more vulnerable. Here we have to choose between an improbability and an impossibility, so need not hesitate which view to take.

2. The state of the gall bladder was quite consistent with an attack of biliary colic.

It is time textbooks taught, what most surgeons know, namely, that the great majority of gall stone attacks are due to plugging of the neck of the gall bladder, and not to the passage of a stone along the ducts.—I am, etc.,

Bolton, Dec. 28th, 1919. R. D. MOTHERSOLE.

THE MACHINERY OF THE ASSOCIATION.

SIR,—I note in the SUPPLEMENT for December 13th an invitation to members of the Association to submit to a special committee, which is considering the subject, suggestions as to desirable modifications in the machinery of the Association. Doubtless many suggestions will be submitted. I hope to send some myself. But serious consideration should be given by the committee and those sending suggestions as to the essential functions which the Association is intended to perform by means of its modified and, we will hope, perfected machinery.

It would be well, I think, if those interested would carefully study a series of supplements to the *New Statesman*, issued a year or so ago on professional organization. I do not suppose that all medical men would agree as to the accuracy of the history of organization of the medical profession set out in the special supplement dealing with our profession. But there are valuable lessons to be learnt from it and from the particulars given of efforts made by other professions to secure adequate organization. Particularly valuable, I thought, was the classification of the objects to be obtained by professional organization. The writer or writers of these supplements seemed to incline to the ideal of a single body constructed so as to be able to secure the fulfilment of all the objects that should properly be aimed at by professional organization.

My own personal experience of organization as applied to the medical profession leads me to doubt the feasibility of any attempt to reach this ideal so far as medicine is concerned, and nothing that I read at the time in the various supplements convinced me that it was any more likely to be successful in other professions. If I am wrong and it is possible and desirable for a single body to do the necessary work, and the Association decides to endeavour to occupy this position of great responsibility, its machinery must be adapted to this end. But if, as I hope, the Association intends to play a less ambitious part, it must define either the work it wishes to do or the work it wishes to leave to other bodies, and secure a constitution adapted to its task limited in this positive or negative manner.

The three divisions of the work of professional organization, if I remember aright, laid down in the article to which I have referred above are as follows:

(1) The control of admission into, and continuance within, the profession.
(2) The development of the knowledge which forms the basis of the profession's work.
(3) The maintenance of the standard of professional work and conduct, and the safeguarding of the social and economic interests of its members.

If this classification is accepted it will be for the committee to advise the Association as to the changes, if any, in its machinery which are desirable to enable it to carry out all or any of these classes of work.

Personally I believe it would be wise for the Association to confine its energies to (3), leaving (1) and (2) to the General Medical Council and the Royal Society of Medicine respectively. For this limited though still considerable and highly important work the Association would be best equipped by completing the good work begun chiefly by Horsley of democratizing its constitution, in the light of the experience now being gained with some pain and difficulty in respect to representative government in industry.

I hope that any members who may agree with me that more complete democratization of the Association is desirable will send to the committee suggestions as to the best means of carrying it out.—I am, etc.,

London, W., Dec. 15th, 1919. LAURISTON E. SHAW.

Universities and Colleges.

UNIVERSITY OF LONDON.

A MEETING of the Senate was held on December 17th, 1919.

The following were recognized as teachers of the university in the subjects at the institutions indicated:

Guy's Hospital Medical School.—Mr. T. B. Layton (Aural Surgery), Mr. William M. Mollison (Laryngology), Dr. Nathan Mutch (Clinical Medicine).

London School of Medicine for Women.—Mrs. Mary F. L. Keene (Anatomy).

Hospital for Sick Children.—Mr. L. E. Barrington-Ward (Diseases of Children).

Professor A. E. Boycott, F.R.S., having relinquished his military duties, has resumed the appointment of Director of Research under the Graham Legacy Committee.

The Vice-Chancellor, Sir Cooper Perry, in view of his appointment to be Principal Officer, has from February 1st, 1920, resigned his office, and Dr. Sydney Russell Wells was elected Vice-Chancellor for the remainder of the year 1920. Dr. Russell Wells was also elected chairman of the Brown Animal Sanatory Institution Committee.

An additional first examination for medical degrees will begin on March 22nd. Forms of entry, to be obtained on application to the Academic Registrar, must be returned, accompanied by the proper fee, by February 23rd.

Dr. W. L. Symes will give a course of eight lectures in the Physiological Laboratory of the university on physiological balanced solutions on Tuesdays at 5 p.m., beginning on January 27th. Dr. J. W. Trevan will deliver at St. Bartholomew's Hospital a course of eight lectures on the reaction of the blood and acidosis on Wednesdays at 4.30 p.m., beginning on January 28th. Dr. Pembrey and Mr. J. H. Ryffel are giving a course of eight lectures at Guy's Hospital on the regulation of respiration on Thursdays at 4.30 p.m., beginning on January 8th. These courses, which are free, are recognized as advanced lectures which a candidate at the B.Sc. Honours examination may name for part of his examination.

Medico-Legal.

UNQUALIFIED TREATMENT OF VENEREAL DISEASE.

HEAVY fines were imposed at the Newcastle-on-Tyne Police Court on December 16th for infractions of Section 1 of the Venereal Disease Act, 1917; the charges were of having (not being duly qualified medical practitioners) unlawfully for reward prescribed a remedy for venereal disease and given certain advice. Mr. V. B. Bateson, the deputy town clerk, who conducted the prosecution, stated that the Act was directed to getting rid of backstairs shops, where persons suffering from the disease received inexpert and inadequate treatment. He mentioned that in Newcastle a scheme had been established whereby any person suffering, or believed to be suffering, from such disease might have the highest measure of medical skill free of charge, and with absolute secrecy. In one of the cases heard, in which there were four informations, the bench imposed a penalty of £50 in each (£200 in all). In another case there were two informations against each of two defendants, and the penalty in each case was £50 on each summons. In a third case the bench imposed a penalty of £50 in respect of each of two summonses, or £100 in all.

SIR WILLIAM OSLER.

WE published last week a biography of Sir William Osler in which the main incidents of his career were briefly set out. We are now able to publish tributes from many of the University medical schools in the United Kingdom, written in response to our request.

The two Regius Professors of Oxford and Cambridge worked together in union and with constant exchange of ideas. "I was," Sir Clifford Allbutt tells us, "rarely a week without a little affectionate postcard or a letter." Much good has come to English medicine during the last fifteen years through this close union of two great leaders. When Osler's pupils and friends on both sides of the Atlantic determined to offer him a Collection of Essays in celebration of his seventieth birthday, it was natural that his "brother Regius" should make the presentation. In doing so Sir Clifford Allbutt expressed in a few sympathetic sentences the feelings of respect and affection by which all the givers were inspired. His words were reported at the time,[1] but we have permission to reproduce here a dedicatory letter written last March:

My dear Colleague,

The stealthy foot of time carries us from youth to age so imperceptibly that we are hardly aware of the change; insensibly we shorten our arms, husband our strength, and are willing to think our prowess undiminished. Yet men have not refrained from marking the lapse of time by signal days, and months, and years; often by celebration of those whose lives have been devoted to the good of their kind, often by memorials of joy and achievement, or again of bitter and unforgotten sorrow.

And, as for the nation or the race, so in his own life, are there for each of us memorable days of sympathy in joy and sorrow. One day of sympathy in joy was that in the summer of 1904 when some of us were gathered around the hospitable hearth of Sir John and Lady Burdon-Sanderson, and, as suddenly, I believe, to you as to the others of us, like a flash of light the thought was born, how one scarcely knew, that you might surrender your great functions at Baltimore to enter upon a new life at Oxford.

Ever in the heart of the folk of the New World lies warm and deep the kinship with the old home; thus, almost with the rapidity of thought, between Canada, the United States, and Great Britain, an academic link threefold was forged. In no person so well as in your own could this unity have been so happily consummated; you arrived indeed from overseas, but as a pilgrim child of Oxford. In you the literary and historical tradition of the beautiful city was united with the zeal and adventure of the New World; so that in winning you for Oxford, and for Cambridge and Great Britain, we did no robbery to Baltimore and Montreal.

Since that day we have shared, in our degrees, your happiness and your sadness; we have rejoiced in your honours, and on this day when you reach the limit that the men of old regarded as the last ripeness of a man's life, I, your brother Regius Professor, am permitted to offer you as a tribute of our admiration and affection from both worlds, our little horn, if not of plenty, yet the best of our garden. Your "radical humours contain more than sufficient Oyl for seventy years"; oyl enough to keep your lamp trimmed and bright till the Old World, now tardily procreant, be brought again to the birth. Meanwhile in good days or evil you can thankfully say after our great example, "My Father works hitherto and I work."

Affectionately yours,

C. A.

The volumes arrived in Oxford two days before Osler's death—he never saw them.

Sir Clifford Allbutt has, as President of the British Medical Association, expressed the feeling of all its members in an appreciation contributed to the larger world of science through the columns of our contemporary, *Nature*. In it he speaks of Osler going to Oxford, "bringing with him, as gifts from the New World, an openness and simplicity of mind and conversation, a frankness and generosity of temper, a freedom from the frost and weight of custom, and a pioneer's command of affairs which made him as delightful a fellow worker as he was clear-sighted and effectual. . . . Oxford took him to her heart as her own; there as one of her own he rested. And if Osler had not also to capture Great Britain, as he captured Oxford, it was because Great Britain was already his mistress. Indeed, there was not a school of medicine in the Old World where his presence was not almost as well known, and his friendship as precious, as in the New. It was characteristic of him that a few years later he obtained leave from Oxford to spend some months in Paris, during which period he regularly attended the clinics of the great hospitals at 7.30 a.m., like an ordinary student."

Sir Clifford Allbutt continues:

> A quality which made Osler so fascinating a companion, his teaching so vivid and telling, and his parts in debate often so lively, was his wit and humour; the sharpness of the wit tempered by the sweetness of the humour. Indeed, much of his playfulness and whimsical mystifications were, in naturalist's phrase, a protective colouring to cover deep sensibilities.
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> Of Osler's contributions to knowledge it is as hard to make a list as it would be for Socrates. They were many, no doubt, but consisted even more in his insemination of other minds, in personal teaching and influence upon his disciples. His great textbook, for many years, and still, the guide of every English-speaking student, had many and almost singular merits. Although within its compass no particular subject could be dealt with at large—for every subject had to be kept in subordination to the whole—yet in the successive editions it was always helpful in any quest to turn to "Osler," because, if it were but in a word, or the turn of a sentence, one perceived that the latest and best researches, if not presented in detail, were known to the author. Thus the work was not a provider only, but also to the wise an indicator. The reader feels as he reads that both whole and parts were being continually readapted to the developing phases of knowledge. Perhaps the author's most original and valuable researches were in the field of the diseases of the spleen and blood; but he made eminent contributions also to the study of infections of the heart, of angina pectoris, of malaria, and of many minor maladies. But, the most modest of men, his conversation was always of the good work of others, silent on his own.
>
> Osler's work for others was so incessant, and his hospitality so unbounded, that one always wondered when and where he amassed and made use of his learning; learning which, in particular, would discover itself, as it were, by accident, unless, indeed, his companions were expert enough to see it under the surface of his talk. Somehow or other he put himself not only in sympathy with various subjects of study other than medicine, especially with literary pursuits, but he was able also to converse on something like equal terms with the masters of them.

OXFORD.

THE DEAN OF CHRIST CHURCH:

In a private letter from which he permits us to quote the Dean of Christ Church (the Very Reverend Sir Thomas Strong, G.B.E.) recalls that the first time he met Osler was during the annual meeting of the British Medical Association in Oxford in July, 1904, when Osler was still professor of medicine at Johns Hopkins. "He was to have been my guest, but at the last moment went to Sir John Burdon-Sanderson. In the course of the proceedings he called to apologize for having broken from my party. When, a little later, he was made Regius Professor of Medicine, having made his acquaintance and heard something of his fame, I took counsel with other members of the governing body here, with the result that I was instructed to cable out to him and offer him a Studentship (that is, a place on our governing body). I remember that when he called in 1904 he talked to me about John Locke and Richard Burton; but I did not know how great a devotion he had to these great men. In his letter accepting our offer, he told me that nothing could have pleased him more than to hold the position of Student here, which had been held by both his

[1] BRITISH MEDICAL JOURNAL, July 19th, 1919, p. 80.

prophets, Locke and Burton. It is interesting that on the night, in the interval between the service on Thursday afternoon (January 1st) and the journey to London on the morning of January 2nd, his body rested in the Cathedral close by the monument of Richard Burton. The article in the last issue of the JOURNAL has helped me to understand what always rather puzzled me, and that was the enormous range of Osler's knowledge. After he had been here a little time he sent me a copy of his big book, *The Practice of Medicine*, saying he thought the head of his college ought to know the sort of things he was after. Of course, it was not a thing I should read through; but I turned over the pages, and my eye was caught from time to time by phrases such as this: 'In a case which I saw in such-and-such a place': and it seemed to me that he must have had extraordinary opportunities of seeing cases of various ailments, and that his book really depended upon this very wide experience. But I did not know at all how he had got it, and this your article to a large extent explains.

"It was a very great gain to us to have him as a member of the governing body. Socially, of course, no one could have been more delightful. But apart from that, though he was rather irregular at our meetings, he took a real interest in the business of the college; and he had so many varied subjects of interest that he could help us in a variety of unexpected ways. I remember that very shortly after he came here there was a question of accommodation in our library; our books were increasing upon us and we were anxious to find space. The question was raised whether we should move, or perhaps get rid of a part of, an old collection of scientific books, all long since out of date. We asked Osler to go through them. There were, of course, some that were of no importance, but a large number of them had come to us as a single collection from the library of Lord Orrery; and though they were now of no use from the point of view of scientific teaching, Osler was enormously impressed to find a more or less complete library of a man interested in science in the early eighteenth century. He made a careful statement at a subsequent meeting about them and their value from the point of view of the history of science. From the same source we have a collection of scientific instruments, of which Mr. Gunther of Magdalen has been writing recently; and these were a great interest to Osler. I think that one of the great grounds of distinction in his outlook was his habit of co-ordinating the present and the past without, so far as I can understand, being behind in the movement of science at the present time. It will easily be understood what a power in a university, where literature occupies such a large place, this characteristic gave him of mutual understanding and friendship. I came across him also on the delegacy of the University Press and in the management of the Bodleian, of which I was a curator during my time as Vice-Chancellor. He had the greatest interest in the Bodleian and always was forward in promoting its interests—the Bodleian Record owes almost its existence to him."

Dr. C. S. SHERRINGTON, F.R.S., Waynflete Professor of Physiology, Oxford:

Many traits of Osler will be adverted to, and by those better competent than I to do them justice. To my own thinking, among the characteristics which endeared Osler to his friends none was perhaps more striking than his combination of an intense affection for the past, and not least for the antique past, with an enthusiastic receptivity for the new, a sort of open-arms embracing of the future. To run his eye backward and forward along the historic continuity of Medicine seemed with him a daily and hourly habit. No man, I think, was ever less open to the misconception of the present as a moment apart, a thing that was stopping still to be looked into, and was intelligible by itself alone. Akin to his optimistic welcome of the new was his genial sympathy with the young; there was never a greater believer in the young generation than Osler, or a more generous encourager of it.

LONDON.

Sir HUMPHRY ROLLESTON, President of the Royal Society of Medicine:

It is difficult to find the right words to describe such a many-sided man, the like of whom we shall not look upon again. It is the more difficult because so many others must feel that the guide, philosopher, and true friend, to whom in the event of trouble they could confidently look for help, has been taken. It is indeed hard to believe that never again shall we see that familiar figure and that the voice of that blithe spirit with its humorous and kindly touches is for ever silent.

Perhaps the most remarkable of his many gifts was that of rapidly making and then permanently retaining friendships. To see, speak to, and place at his ease as naturally his equal a young man, somewhat in awe of a famous leader of his profession, seemed an easy matter in his hands, and no doubt was the outcome of a wonderful sympathy that never failed, and at the same time was never obtrusive or other than natural in a very human man. This made him the same age as his companion, and indeed much as he loved old men, he delighted in meeting the young; with children he was a romping companion; to a mother in terrible distress for a son lost in the war the gentlest of comforters; and it was inevitable that in spite of his bravery he was never quite the same after his only son was killed on August 30th, 1917. There was no trace of the wall between the generations that the years so often build up, and probably few ever realized how strange this really was. His encouraging and stimulating attitude to young men made Oxford a Mecca to which there was a constant flow of pilgrims, especially from Canada and the United States, all certain of a welcome. Annoyance, irritability, or personal feeling of any kind was impossible to imagine in connexion with his sunny temperament; that this was part of his philosophy of life is obvious in his charming address "Aequanimitas," and his attitude to his professional brethren finds expression in another address in the same volume on "Unity, Peace, and Concord." Though a shrewd judge of character, neither his opinion nor the reason for it, if unfavourable, was given unless there was some urgent reason, and then the man's surroundings were blamed or a semi-humorous phrase settled the question without further affecting reputation; what he did not say in such circumstances was often very significant of his charity to poor human nature. There was a close resemblance between his personality and the written message conveyed in his charming addresses; the serious *motif* was always clear, but it was worked in with such a light hand that there was none of the solemnity or tedium almost inseparable from even a lay sermon. All his life he had been a lover of old authors and old books, Sir Thomas Browne being undoubtedly his favourite and his prototype in life's philosophy; thus it was that he did much to attract others to medical history and bibliography by weekly meetings during term at his house, at which the advances in medicine were sketched and early editions of the corresponding epoch-making works passed round. His literary style was epigrammatic, with apt illustrations, attractive from its classical flavour, and with the distinction conferred by his easily discernible personal touch. This was a feature of his popular textbook, so remarkable for its up-to-date picture of our science; a new edition was busily occupying his thoughts when his fatal illness began. His output was enormous, and it was a puzzle how, with innumerable engagements outside and an open house very rarely without its complement of visitors, he found time to read and work. To see him examine a case was a lesson in thorough clinical observation, and not least because the patient's interest was not forgotten in that of the case. His energies were freely given to campaigns in the public interest, such as tuberculosis, venereal disease, medical education, and the financial needs of the universities. As a result of an unrivalled clinical experience, a peculiarly retentive memory, and a habit of systematic work, his name will be always connected with a number of clinical syndromes, such as chronic splenic anaemia, polycythaemia rubra (Osler-Vaquez's disease), and the painful erythematous swellings in the skin of the hands and feet in malignant endocarditis (Osler's sign). But these are of comparatively little importance in comparison with the rest of his work in general medicine.

To those who knew Osler well the simple lines written by Sorley about a V.C. who fell in the war, will not appear unsuitable:

> We know the glory that is his,
> A glory that can never die.

Dr. ARNOLD CHAPLIN, Harveian Librarian, Royal College of Physicians, London:

Although full justice has been done to the great merits of Sir William Osler as a man and as a physician, there is one aspect of his influence in medicine upon which insistence should be laid. It may be doubted if the annals of medical history contain another example of a physician uniting so completely in his intellect a whole hearted veneration for the past in medicine and the keenest enthusiasm for modern medical methods and knowledge. The history of our profession teems with the names of those who initiated new ideas, developed new theories, and forced the advance of medical knowledge against all opposition. It also contains the names of many who feared to embrace new doctrines because they clashed with the traditions of a departed age, and were contrary to the teaching of so-called authority. Both classes of thinkers had their limitations, and each would have accomplished more could it have borrowed from the other. But Sir William Osler's intellect was so fashioned that, while essentially modern in thought and action, it possessed, nevertheless, a deep and abiding sympathy with the past. When approaching any problem connected with medicine he invariably used the historical method, and while he was bold in deduction, his conclusions were all the more reliable, since they had been checked and tested by an appeal to the work of those who had gone before. Eager to advance along the untrodden path, he never neglected to scan the road left behind for any indications as to the course to be pursued. These were the methods employed by the great clinicians, and in the hands of Sir William Osler they produced those results which raised him to such a commanding position in the art of medicine.

The introduction of the knowledge of Greek in the last years of the fifteenth century, the so-called "new learning," gave the death-blow to the intellectual monstrosities produced by centuries of scholasticism. It softened the hard intellectual processes; it widened human sympathy, and acted on knowledge generally in the same way that the principles of equity adjusted the rigours of the common law. Sir William Osler applied the same principles to medicine. Widely read, with deep human sympathies, his conception of the ideal physician was not merely that of a man fully equipped with medical and scientific knowledge to contend with the problems of his art, but one possessed of a wide culture designed to increase his influence in the practice of his profession. He was fully conscious of the fact that while every day more and more time is being bestowed upon the superstructure of special medical knowledge, less and less time can be devoted to the foundation, and he threw all the weight of his influence into the appeal for a wider knowledge in the medical man, and, therefore, a wider sympathy with thought and action in human affairs. He knew full well that time sets a limit to the acquirement of general knowledge, and that a medical student is peculiarly handicapped in this respect. But he gave splendid encouragement to the study of the history of medicine, a subject easily within the reach of the medical man, and closely allied to the serious purpose of his life. Probably he would have agreed that no better subject could engage the attention of the busy practitioner during the few leisure hours at his disposal, for it embraces considerations of history, biography, philosophy, mediaevalism, and the classics—in fact, most of the activities that have occupied the human mind. No better monument to his efforts in this direction can be found than the new school for the study of the history of medicine and science at Oxford, which owes its inspiration almost entirely to Sir William Osler's powerful advocacy. He did not expect or desire to see medical men devoting much of their time to the study of the humanities, for he knew the arduous nature of a life devoted to medicine, but he felt that, by broadening the mental range, clearer and wiser perceptions would be sure to follow. The physician cannot afford to neglect the "humanities," and while it is not to be expected that all can take rank with Arbuthnot, Freind, Mead, and Baker, yet their cultivation will bring to all increased influence and usefulness. To these principles Sir William Osler was faithful to the end of his life.

MANCHESTER.

Dr. GEORGE R. MURRAY, Professor of Medicine in the University of Manchester:

While we are still in the shadow of so great a loss to medicine it is difficult to express at all adequately a proper appreciation of Sir William Osler's great qualities. Two of the most remarkable features of his genius were his ability to take a wide outlook and to form a sound judgement in all departments of medicine. Possessed of a unique experience of medical men and affairs in two continents, he was able to take a lofty and impartial view of medicine, not only of the present but also of the past and of the future, and to impart to others the results of his survey in clear and striking language. He was always in touch with the growing borders of medicine, and took the warmest interest in the endeavours of younger and less experienced men to expand them by observation and research. He had the capacity of assessing the true value of new developments and was able to recognize the gold and reject the dross more rapidly than others. This power rendered his teaching valuable to both students and graduates and enabled him to produce and maintain his *Principles and Practice of Medicine*, which has been so helpful to students and teachers alike. In these times of unrest and reconstruction we shall greatly miss his wisdom and guidance, which would have been of such inestimable worth to all who are interested in the development of medical education in the immediate future.

BRISTOL.

Dr. J. A. NIXON, C.M.G., lately consulting physician with the British armies in France and on the Rhine; physician to the Bristol Royal Infirmary:

Sir William Osler's public appearances in Bristol were all too few. He was present at the British Medical Association meeting in 1894, when he took part in a discussion on the use of antipyretic drugs. His attitude made a considerable impression, since he condemned freely the use of the drugs which were then almost universally in vogue in the treatment of fevers, and spoke as the staunch advocate of cold baths, especially in the routine treatment of typhoid fever. In 1905 Osler distributed the prizes to the students in the Faculty of Medicine at the University College. His speech on that occasion acted as a great stimulus to the foundation of a university in Bristol. Before his visit a few voices had been raised, almost timidly, hinting that a university was an ideal to be aimed at. His speech put courage into the pioneers, and carried the proposal at one bound from a pious hope to an insistent demand. This was another example of his marvellous gift of encouragement and emboldenment of innovators. On the same occasion he attended the annual dinner of the Bristol Medical School as the guest of the evening, when he made a memorable speech. One phrase from that speech still lingers in our minds, where he described himself as having been "born with the woolly side out," and hence had always been able to rub along with his fellow-practitioners. His enthusiastic admiration for some of the Bristol men of medicine almost surprised his audience, many of whom were less aware than he of the achievements of Prichard (in jurisprudence), Budd (in hygiene), and Symonds (in medicine). But when all was said and done, his chief interest in Bristol was focussed on Thomas Dover, buccaneer, inventor of "Dover's powder," and finder of Alexander Selkirk. Osler followed with eager attention every fresh discovery of Dover's life and parentage. In 1911 Osler again came to Bristol to attend the inaugural meeting of the Bristol Medical History Club. Here he gave no formal address, but wished the club all success, with many wise hints as to lines of progress. He showed his incomparable collection of Sir Thomas Browne's works, and talked of the old Norwich physician almost as a personal friend. On this visit he made the acquaintance of the City Library, principally to do homage to the Duke of Bedford's MS. of Guy de Chauliac. Characteristically he found other treasures to admire; all the *incunabula* had to be brought for his inspection before he could drag himself away. His love of books surely came next after his love of men.

Perhaps the following anecdote, which he related to the writer in 1912, may be new; it is at any rate illustrative of these two aspects of his character finely blended.

Osler was once called from Baltimore to see one of his students ill with typhoid fever. He found his way to a

planter's house in Virginia. It was an old derelict shadow of its former splendour, with broken shutters and gates off their hinges. The grandfather (for the boy was an orphan) turned every convertible thing into drink. After seeing the lad Osler had to wait all day for the night train back to Baltimore. So he found his way to the library and browsed round the shelves. Presently the granddaughter, a charming intelligent girl of eighteen, came in and said: "If you're interested in old books, we've got some much older than these in the attics." There he found stuffed into barrels priceless first editions, including Byron, Shelley, and Keats (*Endymion* and *Lamia* "in blue wrappers"). The volumes comprised practically the whole early history of the house of John Murray. These were the yearly consignments of books which wealthy planters were wont to order from England. Osler told the girl of their great value. She, with tears in her eyes, begged him to say nothing to the grandfather, as he would sell them for drink. Eventually, through Osler's good offices, Putnam's bought the books at so fair a price that the old home was restored and the family fortunes comfortably re-established.

EDINBURGH.

Dr. G. LOVELL GULLAND, Professor of Medicine in the University of Edinburgh:

Osler has been for so many years the outstanding figure in British medicine that we feel lost and fatherless without him. I leave it to others to talk of his medical and literary triumphs, for to me the man has been even greater than his work, fine and enduring though that is. I saw him just before his last illness, when he was full of life and energy and of plans for his own work and for others and full of hope—plans and hope, alas! not to be realized. He was greatly interested in all that we are doing and aiming at in the University of Edinburgh, because so much of it is along the lines which he regarded as the ideal in medical education, and he greatly encouraged us. When, indeed, did he ever fail to encourage anyone who was trying to do good work? There must be thousands who have been helped along a thorny path by his words of cheer. Many years ago, at our first meeting, he gave me criticism, encouragement, and advice which were invaluable, and from that day I loved and revered him. To countless others his helping hand has brought success when failure seemed imminent, and with me to-day they mourn the man and not the great physician and teacher. He loved youth for itself and young people for the promise that is in them, and was far happier when playing with a child than when discussing serious questions with his peers. He would always have young people about him, and his keen sympathy and affection enabled him to enter into their joys and sorrows, and kept him young in defiance of his years. In every man he saw and desired to see only what was best, and so brought out the best in those with whom he had to deal. One left him with a sense of moral uplift, and a desire to be more worthy of his confidence and esteem. To his friends he was always the same. I don't know what he was to his enemies—I doubt if he ever had one.

It is now an old regret that he did not take the Chair of Medicine in Edinburgh. The calmer air of Oxford was perhaps better suited to the full ripening of his genius, and there he had the time and leisure for his literary tastes and work, which would have been denied to him among the strenuous Scots. But what a fount of inspiration he would have been, and to how many more of the young men whom he loved! He gained, and Oxford gained, but I think medicine lost. Valuable though his writings are, one would rather have had an hour's talk with Osler than all his books. It was his personality and his personal radiation which gave him the immense power for good which he possessed. He seemed to exercise it his only half-consciously; he was too humble-minded to value himself as we valued him. Welcomed wherever he went, he walked among us giving help and kindliness with both hands, and the example of a blameless and worthy life.

ABERDEEN.

Dr. ASHLEY W. MACKINTOSH, Professor of Medicine in the University of Aberdeen:

It is significant that, when one read of the death of Sir William Osler, one thought mainly not of the loss to scientific medicine—although this is great and almost irreparable; one felt stunned as by the sense of a great personal sorrow. His was indeed a wonderful personality—full of charm as of compelling power, lovable, unselfish, ever kind and helpful. I met him first at the Oxford meeting of the British Medical Association, and as a secretary of a section I was much impressed by the quiet courtesy and kindness shown by him in our official relations. Later, his letter to me—personally unknown to him—on my appointment to a chair of medicine, addressed to "Dear Brother Regius," was characteristic of the man, and has always been a real inspiration and encouragement to try to be worthy of such a "brother." How many must have had a similar experience! During the annual meeting of the British Medical Association at Aberdeen in 1914—so nearly clashing with the outbreak of the Great War, which was to bring him such a terrible sorrow—I had the privilege and honour of having him as my guest: the happy memory of those days will remain for ever. Great as is our debt to Osler for his contributions to the progress of medicine, the man himself was greater than his works, and I learnt to love him as I have loved few men.

WALES.

Dr. W. MITCHELL STEVENS, senior physician to King Edward VII Hospital, Cardiff:

By the passing of Sir William Osler gallant little Wales loses one of her best friends. When Osler first visited Cardiff, many years ago, his reputation had, of course, preceded him, and many expected to see a more or less typical American of the Anglo-Saxon type, but we were delighted to find him a true and warm-hearted Celt, and in a very short time he was a great favourite among medical men and others in all parts of the principality. On his first visit to Cardiff he noted our incomplete medical school, and also our large rapidly growing hospital, and he expressed his surprise that Wales should be obliged to send her medical students to other parts of the United Kingdom to complete their education, seeing that she had no lack of splendid clinical material.

Osler recognized that there were no better medical students than the Welsh, and that even the poorest Welsh parents were only too pleased to deny themselves in order to educate their sons to a profession. It is therefore not surprising that a man with such warm sympathies as Osler took a very keen interest in the proposed establishment of a Welsh National School of Medicine. He met in the late Colonel Bruce Vaughan a man with ideals similar to his own, and in every effort these two were closely associated, and we have to regret that both these workers for humanity have been taken from us; but their influence will remain.

Osler perceived that our medical school would not be hampered by preconceived ideas or old traditions, and that a virgin soil was presented for establishing a great medical school on the newest lines. In May, 1908, he opened the new out-patient department of the King Edward VII Hospital in Cardiff, and the address he gave on that occasion made a deep impression upon every one present, and served to stimulate both medical and lay interest in the proposed completion of the medical school. In August, 1905, he was present at the laying of the foundation stone of the new medical school buildings, the cost of the erection of which, amounting to £100,000, was to be defrayed by the princely gift of Sir W. J. Thomas. On account of the war these buildings have been delayed to such an extent as to cause great dissatisfaction in Wales, and it is much to be deplored that Osler should not have been able to open them.

In June, 1916, a Royal Commission, of which Osler was a most distinguished member, was appointed to inquire into the subject of Welsh University education in general, and this Commission made certain recommendations regarding the proposed medical school. In March, 1918, Osler came with other visitors to Cardiff under the conditions of the trust deed of the Mansel-Talbot Chair of Preventive Medicine; he inspired such confidence that he was asked to nominate a committee of experts to submit a scheme to the trustees, and when the scheme was approved, to proceed at once to the appointment of a professor. He visited Cardiff and other parts of Wales on many occasions, and was always most willing to give us his advice, and to use his influence on our behalf.

Alas he has passed away, but his memory will ever be held dear, his example will always be a daily stimulus, and his love for his fellow men a lesson to us all.

IRELAND.

Sir JOHN W. MOORE, Representative of the Royal College of Physicians of Ireland on the General Medical Council:

The President of the Royal College of Physicians of Ireland (Dr. James Craig) has intimated to me that you would welcome a tribute to the memory of a great man, the late Sir William Osler, Bt., F.R.S.—a tribute in this case from one who had the privilege of counting Sir William among his close personal friends for wellnigh thirty years.

It was shortly after the appearance of the first edition of his classical work on the *Principles and Practice of Medicine* that Dr. Osler entered into communication with me relative to the subject of fevers and their prevalence in Ireland. As the years passed by he corresponded with me from time to time on that and cognate subjects. The formal superscription in his letters gradually gave way, titles were dropped, and the letters began "Dear Moore," "My dear Moore," and at last, under date September 14th, 1917, came this touching note: "Thanks, dear Moore, for your kind message of sympathy in our sorrow. You know how hard it is—but one must bear these blows bravely. Sincerely yours, Wm. Osler." Five short weeks before, on August 7th, 1917, he had written: "I am grieved to hear that you have lost the boy. How terribly the profession has suffered in this war! Our boy is in the thick of it in France in the R.F.A. Ever yours, Wm. Osler." Many years before, in 1905, Sir William had been asked to open the winter session of the Meath Hospital and County Dublin Infirmary. Owing to press of work he was obliged to decline. He wrote: "It is really a great regret to me to feel that I could not comply with your request, as both Graves and Stokes are among my special professional 'friends.'"

Of Osler's outstanding attainments as an orator, a classical writer, and an accomplished man of affairs there is no need for me to write. His great talents—and they were very many—were at all times and in all circumstances devoted to the benefit of mankind and to the relief of the sick and suffering. His humility, devotion to duty, and the sympathetic spell with which he attracted friends to his side gained for him the title, worn by his forerunner, St. Luke, of the "Beloved Physician."

WILLIAM OSLER had a genius for friendship. The congregation in Christ Church Cathedral on the afternoon of New Year's Day was witness to it. He was a senior to whom had come all the honours, but those who went to do him the last honour were of all ages and ranks, and of many callings. It was a cool grey afternoon, and Oxford was in a mood of sadness as the great bell tolled, and the soft wintry light fell on the towers and spires he had learnt to love for their tranquil beauty and for all that they symbolized—the continuity of thought, the life of the spirit reaching back beyond Erasmus, with whom in temperament and width of learning and in a certain cosmopolitan way of thought, covering serious purpose in light even mocking words, he had affinity.

The Editor of this JOURNAL recalls, still vividly, the first meeting with him many crowded years ago, in the old laboratory in University College, London, where he was at work with Sir E. Sharpey-Schafer—the small wiry frame, the quick gesture, the steady eyes that seemed to read one's inmost thoughts, the swift smile, and hearty friendly greeting—from the first intimate; and, with many incidents between, the last and happy memory of him on a not far past summer afternoon, in the garden of Exeter College, under the great window of the Bodleian Library, as he passed from group to group, a little quieter, perhaps, as though the past were casting its shadow on the future, but saying the right word to each, entering into each man's thoughts, and friendly, always friendly, for he had a genius for friendship. How many of us feel that we have indeed lost not a teacher and a guide only, but a friend.

Here is a little picture of how he struck one member of our profession whose particular vocation might seem far as the poles apart from Osler's:

> The leaders of thought in medical science and literature will hasten to pay their last homage to the memory of the late Sir William Osler. Their words of appreciation and farewell will be read with heartfelt interest by the countless admirers of a very great man. May I venture to add a few words on the personal side, because I think they will appeal to not a few of his friends? Many of us have had reason to think with gratitude of Sir William in times of sorrow, but it is remarkable that his magnetic personality often intruded itself on our thoughts in moments of great happiness, when his bodily presence was far distant. Particularly I think was this the case in lonely but lovely surroundings in the country. Personally, I have thought of him often in times of great enjoyment—watching the sun set on the banks of Loch Lomond, whilst waiting for the evening flight of wildfowl; fishing on the river Spey, and on lonely Highland lochs; admiring the sunset effects on the lovely Cromdale hills and the beautiful shores of Loch Ard. I think his open, generous, kindly disposition, transparent goodness, and unaffected manners created a sort of atmosphere about him that reminded one of the country, so that thoughts of him came without volition in happy scenes such as those I have ventured to describe. Two other great men of equally attractive personality—the late Sir William Power and Sir William Ramsay—produced in me the same effect. The world has lost a wonderful man, but even death cannot rob his friends of their memories of a personality so magnetic as to be almost without parallel. I should not have ventured to write these few halting words did I not feel that I am voicing, however imperfectly, the sentiments of many of those who were fortunate enough to know him, and who have felt, as I have, the indefinable charm which could steal into our happiest moments at the mere thought of him.

To the feeling here expressed others might give different expression, but the impression A. C. H. conveys—the sense of the vivid, sympathetic, friendly soul in Osler—is the impression all who knew him retain. Those who were grateful were a great multitude, some of whom did not know him save by his writings. He said in acknowledging the presentation on his seventieth birthday last July: "To a larger circle of men with whom my contact has been through the written word—to the general practitioners of the English-speaking world—I should like to say how deeply their loyal support has been appreciated. Nothing in my career has moved me more, pleased me more, than to have received letters from men at a distance—men I have never seen in the flesh—who have written to me as a friend."

The funeral service on January 1st was conducted by the Dean of Christ Church, and among the congregation were representatives of Oxford, of medicine, and of the many other interests which entered into Sir William Osler's life.

University of Cambridge: Professor G. H. F. Nuttall, F.R.S. University of Edinburgh: Professor J. Arthur Thomson. University of London: Professor W. M. Bayliss, F.R.S. University of Liverpool: Dr. J. G. Adami, F.R.S. (Vice-Chancellor). University of Oxford: The Vice-Chancellor, the Senior and Junior Proctors, the Master of Balliol, the Warden of All Souls, the Director of Exeter, the Principal of Mansfield, Professor H. H. Turner and Mr. F. A. Bellamy (Radcliffe Observatory). Rev. G. B. Cronshaw (Radcliffe Infirmary, Oxford). Royal College of Physicians of London: Sir Norman Moore, Bt., President, and Dr. J. A. Ormerod, Registrar. Royal College of Surgeons of England: Sir George Makins, G.C.M.G., C.B., President. The British Medical Association: Sir T. Clifford Allbutt, F.R.S., President (who also represented the Faculty of Medicine of the University of Cambridge); Dr. William Collier, ex-President; Dr. Dawson Williams (Editor of the JOURNAL), and Dr. A. W. Neil (Oxford and Reading Branch). Royal Society of Medicine: Sir Humphry Rolleston, K.C.B., President; and its Section of the History of Medicine, Sir D'Arcy Power, K.B.E. Medical Research Committee: Sir Walter Fletcher, K.B.E. Ministry of Health: Dr. A. S. MacNalty. Lister Institute of Preventive Medicine: Professor C. J. Martin, F.R.S. Canada: Sir George Perley, High Commissioner, and Colonel Chisholm, C.A.M.C. Association of American Physicians: Dr. E. J. Wood. Toronto: Lieut.-Colonel G. W. Badgerow (Trinity University, University of Toronto, and Academy of Medicine). Fellowship of Medicine and Post-Graduate Association: Dr. A. F. Hurst and Mr. C. H. Fagge. Oxford Graduates Medical Club: Dr. R. C. Jewesbury. London School of Medicine for Women: Dr. Aldrich-Blake. Classical Association: Professor G. Murray. Director-General Army Medical Service: Colonel D. Harvey, C.M.G. Among others present were Lord and Lady Harcourt, Sir Frederick Treves, Bt., G.C.V.O., Sir William Church, Bt., K.C.B., Sir Archibald Garrod, Sir William Hale-White, and Sir Charles Ballance.

The cremation took place privately at Golders Green on January 2nd.

Obituary.

JOSEPH QUIRKE, M.D.,

Birmingham.

By the death of Dr. Joseph Quirke, of Endwood Court, Handsworth Wood, the profession in Birmingham has lost one of its oldest and most respected members.

Dr. Quirke was born in 1846, the fifth son of the late Dr. John Quirke, of Tullamore, King's County, and it was as a pupil of his father that he laid the foundations of the shrewd clinical judgement and sound knowledge of pharmacology and therapeutics which distinguished his after-career. He received a sound classical education at Tullabeg and Clongowes, and completed his medical studies at the Catholic University School, Dublin, where he gained many honours. At the early age of 21 he qualified, married, and settled in the Handsworth district.

Although an entire stranger and handicapped (in those days) by the circumstances of nationality and religion, his attainments were quickly recognized, and he soon built up a most successful general practice, which was relinquished only some few months before his death, after more than fifty years of strenuous work.

Dr. Quirke was an accomplished obstetrician, and owed a good deal of his success in practice to his skill in that branch of his profession. In addition, his unfailing cheerfulness invariably inspired his patients with hope and confidence, and it was a common saying among them that his presence in the sick room was in itself a guarantee of recovery. In lighter moments his ready wit and inexhaustible fund of anecdote and quotation did much to brighten the patient's outlook.

Leading so busy a professional life—for one period of eleven years he took no holiday—and with the responsibility of a large family on his shoulders, Dr. Quirke found little time for interests outside his work, and took no active part in political or municipal affairs. In 1879 he became a member of the Royal College of Physicians, Edinburgh, by examination, and in 1915 the National University of Ireland conferred on him the degree of M.D. (*honoris causâ*) as a distinguished student of the old Catholic University School, which had not the power of granting degrees in the days when Dr. Quirke qualified.

He was an old member of the British Medical Association, a Fellow of the Royal Society of Medicine (Obstetrical Section), and had filled the offices of President of the Midland Medical Society in 1905–6 and Vice-President of the Birmingham Medical Benevolent Society. In 1887 he was Examiner for the Ingleby Prize in Midwifery at Queen's College, Birmingham. Dr. Quirke was made a Justice of the Peace for the county of Stafford in 1894, being the first Irish Catholic so appointed since the Reformation, and on the absorption of Handsworth into Greater Birmingham was included amongst the city magistracy also.

As in so many other instances among the older members of the profession, the war was primarily responsible for Dr. Quirke's breakdown in health. For a time he carried on unaided his own practice and most of that of his son, Dr. H. C. Quirke, while the latter was serving with the forces abroad, but he was terribly overworked during the influenza epidemic of 1918, when he could not bring himself to refuse to see his old patients. The strain proved too great, his heart failed, and though for some months he appeared to improve, he became gradually worse during the summer and died on August 19th, in his seventy-fourth year.

Dr. Quirke is survived by his widow (whose health unfortunately broke down completely shortly before his death) and a family of four sons and five daughters. Three sons are in the practice of the medical profession, as also is one of his sons-in-law, Dr. F. Rowland, who was released from military service after the armistice to relieve Dr. Quirke in the practice, but, unfortunately, the mischief was already done. Major M. J. Quirke, I.M.S., arrived home from India a few days after the burial, which took place in the grounds of St. Thomas's Abbey, Erdington, after a very largely attended Requiem Mass at the Church of St. Francis, Handsworth, which the deceased had attended since its completion.

ARTHUR RIEUSSETT LITTELJOHN, M.R.C.S.,

L.R.C.P., D.P.H.,

Medical Officer in the Ministry of Health.

We regret to have to record the death of Arthur Rieussett Litteljohn, M.R.C.S., L.R.C.P., D.P.H., M.R.C.V.S., Medical Officer in the Ministry of Health, which took place at a nursing home in London on December 8th at the early age of 38. He was a son of the late Dr. Sa'tern George Littel john and was educated at St. Paul's School and at the Royal Veterinary College and St. Mary's Hospital. He was for some time tutor in veterinary medicine at the Royal Veterinary College and made a number of contributions to scientific journals on veterinary matters of special medical interest. He was the author of a well arranged and very useful handbook on meat and its inspection. In 1911, when Dr. Litteljohn was appointed to the medical staff of the Local Government Board, he had already made a close study of the many important points at which veterinary and human medicine touch in their bearing on public health. He had added to these a sound knowledge and practical experience of public health administration gained in the course of several municipal appointments which he had held, and with this somewhat rare and valuable equipment he speedily found scope in the Food Department of the Local Government Board for the practical application of his knowledge and fine judgement. The war interrupted progress in the special work in which he was engaged and the Food Department immediately became immersed in the task which it undertook for the War Office, of organizing and controlling arrangements for securing that the army's food supplies were manufactured and prepared under proper sanitary conditions.

With those of his colleagues to whom military service was denied, he threw himself with characteristic zeal into this work. Early in 1915 the Local Government Board was asked by the War Office to provide inspectors to undertake supervision of the preparation and packing of the vast quantities of food materials which were being manufactured in North and South America for our armies. Litteljohn was entrusted with this mission in the United States and Canada, and laboured without a break in his extremely arduous and responsible task from the spring of 1915 till the autumn of 1918, when he returned to England much impaired in health, but with the satisfaction of knowing that his work in America had contributed in no small degree to the welfare and efficiency of our troops in the field. His correspondence during this time shows how capable he was of dealing with a big problem in a big way. In spite of the great distances which he had to cover in the United States and Canada, his arrangements enabled him to maintain effective control in all the packing houses engaged on British contracts. The reputation which he had gained at home for sound knowledge of his subject, reliable judgement, and prompt and fair decision was quickly established amongst the American and Canadian packing firms. Many representatives of these firms have since testified their respect and admiration for his gifts in this direction, and the helpful and stimulating spirit in which he invariably dealt with the many difficult problems with which they were faced. It is no exaggeration to say that one of the chief factors which went towards securing the extraordinarily uniform and consistently good quality of the food supplied to our troops during this unprecedented war was the high character of Litteljohn's work, and the respect which his courage and ability inspired in those with whom he had to deal.

After a brief rest in England, during which his health seemed to improve somewhat, he undertook a mission of a similar kind for the War Office in Australia, where he remained for a few months. He had barely completed his work there when his health broke down and he returned to England in July last. Since then he gradually became worse, but his fortitude never deserted him throughout his long and painful illness. For his services and sacrifices during these strenuous years he was mentioned in War Office dispatches.

"A. R." Litteljohn was well known generally as a fine athlete and first-class right-hand slow bowler. He played cricket for Middlesex for a number of years, and he and his brother, "E. S.," also a medical man, on many occasions did brilliant things for the county eleven. His loss will be keenly felt by all his numerous friends, both in the Ministry

of Health, where his ability and high character were fully recognized, and in the world of sport, where he was so well known and loved.

WE regret to record the death on December 2nd, 1919, at the age of 59, of Dr. WILLIAM CAMPBELL DOWNS of Motherwell, after an operation for duodenal ulcer. In 1888 he graduated M.B., C.M. at Glasgow University, and after some experience as assistant in Hamilton he started general practice at Uddingston. During the two years he was there he took the D.P.H. at Cambridge and then bought a practice in Motherwell, where during the last twenty-five years he established a large connexion, ultimately having two partners. In the early stage of this practice he was lecturer on public health at Anderson's College, Glasgow. Although over the age limit, when the war broke out he would, had he been allowed, have devoted his whole time to the army, and actually did serve a year with the R.A.M.C. Dr. Downs had many qualities which attracted and held his friends. Not only was he fond of music and literature, but he had much grit, a quaint turn of humour, and at all times an unaffected manner, which was but the reflex of a genuine and sincere character.

DR. WALTER B. HASTINGS, medical officer Parish of Sleat, Isle of Skye, was accidentally killed on Sunday, December 21st, 1919, owing to the overturning of his car while going to attend a patient. He graduated M.B., C.M.Glasg. in 1892, and settled at Sleat nineteen years ago. Owing to the scarcity of medical men caused by the war he undertook the work of medical officer for the parish of Strath in addition to his work in Sleat, and carried on the duties of medical officer of health for the whole of the island of Skye as well. Dr. Hastings was of the very best type of Highland medical practitioner, capable, and thoroughly reliable. No matter the hour, day or night, he never failed to answer a call, and cheerfully faced often very long journeys under very trying weather conditions. His kindness and courtesy endeared him to all, and he is greatly mourned, especially in the parishes of Sleat and Strath, where his work mostly lay.

DR. ALEXANDER DAVID CRAWFORD, of Stanton Hill, Skegby, Notts, died recently, at the age of 60. He studied medicine at the University of Glasgow, and graduated M.B., C.M. in 1886. He was medical officer of the Marston Green Cottage Home, and served as a lieutenant in the R.A.M.C. during the war. He had long practised at Skegby, and was held in high esteem by his patients and colleagues. He was a member of the Nottingham Division of the British Medical Association. Dr. Crawford was at work on December 15th, and appeared to be in his usual health, but the next day he had an attack of cerebral haemorrhage. He was attended by his friend Dr. Tweedie, of Sutton, but died in the early morning of December 18th. He was buried at Stanton Hill, where the miners who followed the remains and carried them to their last resting place filled the church. Dr. Crawford had three sons, one of whom was killed in France during the war.

DR. CHARLES ROBERT LEADER died from syncope on December 14th, 1919, aged 57 years, at the Old Hall, Wem, Salop. He had been at work up to late the night before his death. He was the son of Henry Leader of Clonmoyle, co. Cork, and was educated at Repton and Queen's College, Cork. He had been in practice at Wem for over twenty years, and was very popular there with all classes of people.

MAJOR-GENERAL JAMES GAUSSEN MACNEECE, C.B., Army Medical Staff (retired), died suddenly at Southsea on December 13th, 1919, aged 63. He was born at Arboe, County Tyrone, on February 27th, 1856, the son of the Rev. James MacNeece, M.A., of Clonfeacle Rectory, Moy, and of Mulnagar Lodge, Dungannon, County Tyrone. After taking the diplomas of L.R.C.S.I. and L.K.Q.C.P.I. in 1877, he entered the army as surgeon on August 4th, 1878, becoming surgeon-major on August 4th, 1890, lieutenant-colonel on August 4th, 1898, colonel on June 4th, 1905, and surgeon-general on April 23rd, 1910, and retiring on December 28th, 1917. He served as P.M.O. at Malta in 1905–9, of the Lucknow Division in 1910–11, and of the Southern Command, England, in 1912–14, till appointed Director of Medical Services in India in 1915. His war services comprise the Afghan war of 1878–80, the siege of Kandahar, and battle of September 1st, for which he received the medal; the Bozdar campaign of 1881, and the Zhob Valley expedition of 1884, on the North-West Frontier of India. In South Africa, 1900–1, he was in charge of a general hospital, with temporary rank of colonel, from January, 1900, to November, 1901, and took part in operations in Natal, March to June, 1900, and in the Transvaal, January to November, 1901. He was mentioned in dispatches, and received the Queen's medal with three clasps. In 1908 the King of Italy bestowed on him the decoration of Commander of the Order of St. Maurice and St. Lazarus for services in connexion with the Messina earthquake of that year, and he received the C.B. at the Coronation on June 19th, 1911.

LIEUT.-COLONEL M. MACGREGOR RATTRAY, D.S.O., died suddenly at Basra, Mesopotamia, on November 27th. He was born at Portobello, Midlothian, in 1869, being the second son of the late A. M. T. Rattray, M.D. He graduated M.B. and C.M. at the University of Edinburgh in 1893, and four years afterwards entered the R.A.M.C. as surgeon-lieutenant. He became lieutenant-colonel in 1915 and temporary colonel the following year. He took part in the South African war of 1900–2, receiving the Queen's medal with three clasps, and the King's medal with two clasps. He served for over four years in the late war, until he was invalided home early in 1919. He received the D.S.O. in 1917, and was twice mentioned in dispatches. Colonel Rattray leaves a sister and two brothers, one of whom is a brigadier-general in the Indian Army and the other Dr. A. M. Rattray of Treharris, Glamorgan.

LIEUTENANT-COLONEL GRENVILLE EDWIN MOFFET, R.A.M.C.(ret.), died at Brechin, Forfarshire, on December 14th, 1919, aged 63. He was born on December 10th, 1856, and educated at the Universities of Calcutta, where he was Duff scholar in 1874, and Aberdeen, where he graduated M.B. and C.M. in 1883. Entering the R.A.M.C. as surgeon in January, 1885, he became lieutenant-colonel on January 31st, 1905, retiring on October 21st, 1905. After retirement he was employed at Perth as medical inspector of recruits from 1905 to 1910, and was also inspecting medical officer of school children. He served in South Africa from 1899 to 1901, took part in operations in the Orange River Colony, and received the Queen's medal with a clasp; he rejoined for service in the recent war, from March 23rd, 1915, and served under the Ministry of National Service until the present year.

MAJOR RICHARD JAMES BRADLEY, Indian Medical Service, was reported as having died on service, in a casualty list published on December 31st, 1919, aged 43. He was educated at Edinburgh University, where he graduated M.B. and Ch.B. in 1901. He entered the I.M.S. in 1902, and attained the rank of major in 1913. He was medical officer of the 1/4th Gurkha Rifles, with which he served in the North-West Frontier of India campaign of 1908, receiving the Frontier medal with a clasp; he served also in the late war. He was decorated with the White Eagle of Servia, Fourth Class, in February, 1917.

STAFF SURGEON SAMUEL GROSE, R.N.(ret.), died at Bishop's Teignton, on December 12th, 1919. He was educated at St. Thomas's Hospital, and took the diplomas of M.R.C.S. and L.S.A. in 1859, entering the navy soon after, and retiring with the rank of staff surgeon, which he reached on August 19th, 1870. He also took the diploma of F.R.C.S.Eng. in 1868, and the degree of M.D. St. Andrews in 1878. After retirement he held the post of honorary medical officer of Melksham Cottage Hospital for twenty-two years. He was a member of the Torquay Natural History Society, of the Devon Association for the Advancement of Science, and of the Wiltshire Archaeological Society.

BRIGADE-SURGEON WILLIAM GEORGE ROSS, R.A.M.C. (retired), died at Thornton Heath, Surrey, on December 25th, 1919, aged 79. He was educated at Edinburgh University, where he graduated M.D. in 1862, and entered the army as assistant surgeon on October 1st, 1862. He retired with the rank of brigade-surgeon in 1885. In the regimental days he served in the King's Liverpool Regiment (the 8th Foot).

SURGEON-MAJOR GEORGE KENNETH POOLE, Bengal Medical Service (retired), died at Upper Norwood on December 19th, 1919. He was born in March, 1832, the son of the Rev. John Poole of Kensington. He received his medical education at the London Hospital, and took the diploma of M.R.C.S. in 1855 and the degree of M.D. at Erlangen in 1863. He entered the I.M.S. as assistant surgeon on March 14th, 1855, being nominated by Mr. W. T. Prinsep, and was one of the last to receive his commission by nomination, after the introduction of competitive examination in January, 1855, getting a vacancy caused by Assistant Surgeon T. F. Clarke, nominated in December, 1854, not joining. He became surgeon in 1867, and surgeon-major in 1873, retiring on May 7th, 1876, forty-three years ago. After his retirement he was consulting surgeon to the Dalrymple Home for Inebriates, and surgeon-major of the Lambeth National Reserve.

CAPTAIN GEORGE ALAN MITCHELL, R.A.M.C.(S.R.), was reported as having died on service, in a casualty list published on December 29th, 1919. He was educated at Liverpool University, where he graduated M.B. and Ch.B. in 1918, took a commission as lieutenant in the Special Reserve of the R.A.M.C. the same year, and was promoted to captain after a year's service.

Medical News.

A POST-GRADUATE course in neurology will be given at the National Hospital for the Paralysed and Epileptic, Queen Square, W.C.2, during January, February, and March, beginning on Monday, January 19th. The fee for the course is seven guineas; further particulars can be obtained from the Dean of the Medical School. A course of practical pathology, the fee for which will be five guineas, will be given by Dr. J. G. Greenfield if there is a sufficient number of entries.

A COURSE on the diagnosis and treatment of the nervous disorders due to war will be given in the clinique of Professor Gilbert at the Hôtel-Dieu, Paris, beginning on January 26th. It has been organized by Professor Maurice Villaret with the co-operation of ten other lecturers who have given particular attention to neurology, and will include demonstrations on orthopaedics and treatment by exercises. The course will extend over three weeks and will occupy both mornings and afternoons. It will be essentially practical and clinical. The fee for the course, which is open to foreign doctors, is 150 francs, payable to the Secrétariat de la Faculté de Médecine, Paris.

THE National Association for the Prevention of Infant Mortality and for the Welfare of Infancy has arranged for two courses of advanced lectures on infant care. One is intended for crêche nurses and probationers, and the other for teachers, infant welfare workers, mothers, etc. The first course is being given at the Essex Hall, Essex Street, Strand, W.C., on Thursdays, from 7.30 to 8.30 p.m., commencing on January 8th; the fee is 10s. for the course, or 1s. for any individual lecture. The second course will be given at the Morley Hall, George Street, Hanover Square, W.1, on Mondays, from 5.30 to 6.30 p.m., commencing on January 12th, the fee for which is 5s. for the course, or 1s. for any particular lecture.

PROFESSOR ARTHUR KEITH will give six lectures on John Hunter's observations and discoveries in anatomy and surgery, at the Royal College of Surgeons of England, on Mondays, Wednesdays, and Fridays during the last two weeks of this month. The lectures will be given at 5 p.m., and the first, on January 19th, will deal with Hunter's contributions to our knowledge of the heart and blood vessels.

PROFESSOR G. ELLIOT SMITH will begin a course of lectures on fine art anatomy at University College, London, on January 15th, at 5 p.m.

THE address by Sir Humphry Rolleston on the uses and methods of application of post-graduate teaching will be given on Tuesday next, at 4.30 p.m., at the Prince of Wales's General Hospital. Members of the profession are invited to attend.

MR. JOSEPH WATSON of Wetherby has presented the sum of £50,000 to the Leeds General Infirmary as a new year's gift, stipulating that £10,000 shall be invested for the benefit of a nurses' pension fund.

THE offices of Epsom College have been transferred from 37, Soho Square, W., to 49, Bedford Square, W.C.1.

AN order has been issued by the Ministry of Health continuing the regulations for the compulsory notification of acute encephalitis lethargica and acute polio-encephalitis until further notice.

DR. ROBERT DONALDSON, M.A., F.R.C.S., D.P.H., has been appointed Pathologist and Curator of the museum at St. George's Hospital. The appointment was held by the late Dr. R. Salusbury Trevor; since he died the work of the curator has been carried on by Miss Helen Ingleby, M.R.C.P., and Sir Humphry Rolleston, K.C.B., has been supervising the pathological laboratory honorarily.

THE League of Red Cross Societies has informed the presidents of the twenty-eight National Red Cross Societies, members of the League, that a meeting of the General Council will be held at Geneva on March 2nd, 1920. The business of the meeting will be the appointment of additional governors, the discussion of the progress of the League on the lines indicated at the Cannes conference, and of future development in general.

DR. GEIKIE COBB'S book, *The Organs of Internal Secretion*, of which the second edition was noticed in our columns last March, has been translated into Spanish by Drs. De La Poza and Toutain and into Italian by Professors Belfanti and Valagussa.

Letters, Notes, and Answers.

ORIGINAL ARTICLES and LETTERS *forwarded for publication are understood to be offered to the* BRITISH MEDICAL JOURNAL *alone unless the contrary be stated.*

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate with the Office, 429, Strand, W.C.2, on receipt of proof.

IN order to avoid delay, it is particularly requested that ALL letters on the editorial business of the JOURNAL be addressed to the Editor at the Office of the JOURNAL.

THE postal address of the BRITISH MEDICAL ASSOCIATION and BRITISH MEDICAL JOURNAL is 429, Strand, London, W.C.2. The telegraphic addresses are:

1. EDITOR of the BRITISH MEDICAL JOURNAL, *Aitiology, Westrand, London;* telephone, 2631, Gerrard.
2. FINANCIAL SECRETARY AND BUSINESS MANAGER (Advertisements, etc.), *Articulate, Westrand, London;* telephone, 2630, Gerrard.
3. MEDICAL SECRETARY, *Medisecra, Westrand, London;* telephone, 2634, Gerrard. The address of the Irish Office of the British Medical Association is 16, South Frederick Street, Dublin.

QUERIES AND ANSWERS.

FETAL MOVEMENTS.

A CORRESPONDENT raises the question whether it is possible to deduce any facts as to a child's future size, physical development, and sex from the violence of the fetal movements in utero at the seventh month.

*** The answer, so far as we are aware or can ascertain, is a general negative. It would not be unreasonable to expect that a child that was particularly lively in utero at the seventh month and subsequently, would prove at birth to be healthy and well developed; but nothing could with any safety be deduced as to sex or other particulars. There are other factors to be considered besides the fetus—for example, the nervous susceptibility of the mother, the thickness or thinness of the uterus and abdominal walls, the presence or absence of the placenta anteriorly, the quantity of liquor amnii, and so forth.

INCOME TAX.

E. E. F. inquires whether a local assessment charging 1s. 9d. in the £ on his military pay for service in the Egyptian Expeditionary Force is correct.

*** The rate, 1s. 9d. in the £, is the correct rate for the years mentioned provided that the amount of the total income

for each year exceeded £500 but did not exceed £1,000. Normally the tax is deducted by the army pay agents, but we understand that local assessments have been made in some cases where an insufficient amount of tax was deducted by the agents. We suggest that "E. E. F." ascertains from Holt and Co. exactly what tax was deducted by them, and that he then compares those figures *plus* the amount of tax charged locally with the tax calculated at 1s. 9d. in the £ on the amount of the pay for each year. If our surmise as to the origin of the local charge is correct, the local inspector of taxes should be able to explain the matter in detail.

LETTERS, NOTES, ETC.

THE PREVENTION OF BERI-BERI.

DR. ALFRED S. GUBB (Algiers) writes: The cause of beri-beri having been traced to the use of polished or over-milled rice as food, we are comforted with the assurance that the disease can be cured by administering an extract of rice polishings to the sufferers. But why in the name of logic and common sense do the authorities not prohibit the placing of polished rice in the market—at any rate, in the market whence the afflicted populations derive their supplies? It may be, of course, that for some inscrutable reason this measure does not fall within the compass of practical politics, but if not, why not? It has been drummed into our ears so long that "prevention is better than cure," that the above suggestion obtrudes itself on one's attention.

SEVERE ANAPHYLAXIS: RECOVERY.

DR. G. C. GARRATT (Chichester) writes: I am sure we shall all be ready, with Dr. A. Estcourt-Oswald (December 27th, 1919, p. 868), to congratulate Captain Munro on his "prompt and plucky treatment" which achieved such success (BRITISH MEDICAL JOURNAL, November 22nd, 1919, p. 668). Nevertheless one is tempted to wonder whether the remedies used were the best possible. He injected adrenalin, used chloroform inhalation under conditions which for a time precluded satisfactory anaesthesia, and forcibly compressed the chest. Was there not grave risk of inducing fatal ventricular fibrillation? It would be very useful to know whether the good results obtained could have been achieved by the chloroform without the adrenalin, or the latter without the chloroform, or whether the atropine also given prevented injurious action by a combination generally regarded as so risky as adrenalin and chloroform. As such a case might occur in the practice of any one, the answer to these questions assumes real importance, and I hope it may be forthcoming from some source or other.

OCULAR CONDITIONS IN INFLUENZA.

MR. SYDNEY TIBBLES (London, W.) writes with reference to paragraph 242, p. 41, of Epitome, December 13th, 1919: A doctor's sister asked me, on visiting, in 1913, to see her cat, which had had influenza, and was being treated by a veterinary surgeon. It had mydriasis of both eyes and some limitation of movement of the external ocular muscles, and also, apparently, peripheral neuritis of one leg. A week later violent iridocyclitis set in with much keratitis profunda. In spite of atropine locally, extensive iritic adhesions formed, and the cat became half blind, and was destroyed. It was impossible to obtain an eye for sectioning, but so long as it was possible to see the fundus there were no further complications. Veterinary surgeons have told me that iridocyclitis is fairly common after influenza in cats, but I do not know whether that is so or not.

THE FOUNDER OF CHINESE MEDICINE.

SHEN NUNG (B.C. 2733-2697) is generally regarded as the founder, or rather the first patron, of medicine in China. He ruled as an emperor first in Shensi and later in Shantung, with Yenchowfu as his capital. His name has been handed down by tradition as the founder of agriculture, trade by exchange of commodities, and medicine by the use of various kinds of herbs for the relief of pain, and by distinguishing medicinal from poisonous plants. The image of Shen Nung is often found in temples dedicated to agriculture. The *National Medical Journal of China* for June publishes a photograph taken from a figure shrined in a special temple in the famous Imperial Granary established at Peking by the Ming emperors, where for centuries the tribute rice from various provinces was stored. This granary has now been demolished, and its site is occupied by the new Army Medical College, transferred from Tientsin, and now under the direction of Surgeon-General Chuan Shao Ching.

THE TAGLIACOTIAN DOCTRINE.

A CORRESPONDENT writes with reference to Sir J. O. Skevington's note on "Separation of the tip of the nose with complete primary union" (BRITISH MEDICAL JOURNAL, September 27th, 1919) to recall certain passages in John Bell's *Principles of Surgery*, vol. i, published in 1801. In discussing the "Tallcotian doctrine of adhesion," Bell says that the vulgar credulity of Garengeot is responsible for the following: "A young fellow, says he, a soldier, reeling out of a tavern drunk along with some of his companions, got into a quarrel in which one of them bit his nose off, threw it into the gutter and trod it under foot. He picked up his nose, flung it into Mr. Gallin's, an apothecary's shop, ran after the fellow who had done it, and when he returned Mr. Gallin washed the nose at the well, stuck it with plaster in its place, and in two days after it was firmly united; and Mr. Garengeot four days after dressed the nose with his own hands." The Tallacotian doctrine of adhesion, says Bell, is unquestionably true but not to this extent; "I hold it possible to preserve every flap of skin, though almost entirely insulated! though left hanging by a tag merely! but those parts which are entirely separat d are entirely and irrecoverably dead."

Bell emphasizes his scepticism by quoting Rabelais's burlesque story of the setting on of a head: "Having gone out to search the field for Episthemon, they found him stark dead, with his head between his arms all bloody. But Panurge said, my dear bullies all, weep not one drop more, for he being yet all hot I will make him as sound as ever he was. In saying this he took the head, and held it warm foreagainst his cod-piece, that the air might not enter into it, and other two carried the body. Leave off crying, quothe Panurge and help me. Then cleansed he the neck very thoroughly with white wine, afterwards he annointed it with I know not what ointment, and set it on very just, vein against vein, sinew against sinew, and spondyle against spondyle, that he might not be wry necked. This done he gave it round about, some fifteen or sixteen stitches with the needle. Suddenly Episthemon began to breathe, then opened his eyes, yawned, sneezed . . . ; now certainly quothe Panurge, he is healed, and so he was finely, only that he was somewhat hoarse for about three weeks together." Rabelais may have had in mind the story of the Laconian woman named Avata who suffered from a dropsy. Her mother made a pilgrimage for her to the sanctuary of Aesculapius at Epidaurus, and there dreamed that the god cut off Avata's head, and hung the body up neck downwards till all the water had run out; he then took down the body and clapped on the head. On the mother's return to Lacedaemon she found her daughter perfectly cured (Frazer's *Folk Lore in the Old Testament*, vol. ii, p. 48.)

A SOFT ANSWER.

SIR SAMUEL WILKS was severe in his judgement of contemporaries and was apt occasionally to express his opinion in caus ic phrases his victim did not easily forget. It may have been a resolution to be more careful in an official position that led him unexpectedly to get up at an informal dinner on the evening of the day of his election to be President of the Royal College of Physicians and make a little speech on the text, "A soft answer turneth away wrath." As an illustration of the advantage of acting in this spirit he told a story of Addison, who had been his teacher at Guy's. The story, so far as we are aware, has not hitherto appeared in print, although it may be well known, since we were reminded of it some years ago by a correspondent. When Addison was establishing the nature of the disease which bears his name Dr. George Harley, who lived in a house near Addison's, took to meetings of the Pathological Society cats which had apparently remained in good health after removal of the adrenals, proving, as Harley contended, that these organs were of no vital importance and that disease of them did not cause the symptoms described by Addison. At one meeting of the Society he brought a dissection of a cat apparently perfectly healthy, which nevertheless had diseased adrenals. Addison did not argue the matter, but asked Harley what was the colour of the cat. "An ordinary tortoiseshell cat," Harley replied. "Ah!" said Addison, "I knew that cat. Six months ago it was a white cat."

VACANCIES.

NOTIFICATIONS of offices vacant in universities, medical colleges, and of vacant resident and other appointments at hospitals, will be found at pages 42, 45, 46, 47, 48, and 49 of our advertisement columns, and advertisements as to partnerships, assistantships, and locum tenencies at pages 43, 44, and 45.

THE following appointments of certifying factory surgeons are vacant: Kidwelly (Carmarthen), Kirklisten (Linlithgow), Lerwick (Shetland), Mold (Flint).

SCALE OF CHARGES FOR ADVERTISEMENTS IN THE BRITISH MEDICAL JOURNAL.

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NOTE.—It is against the rules of the Post Office to receive *poste restante* letters addressed either in initials or numbers.